Stephen Dersley: Doctoral Thesis

Applying Ludwik Fleck's theory of thought collectives and thought styles to the study of cultural change

Zastosowanie teorii kolektywów myślowych i stylów myślowych Ludwika Flecka do badania zmiany kulturowej

Abstract

The thesis aims to show how Ludwik Fleck's theory of thought collectives and thought styles can be applied to shed light on aspects of cultural change that elude alternative theories and models.

The thesis begins by highlighting the shortcomings of theories that reduce cultural change to single determinants: the base/superstructure dichotomy of Marxian economic determinism that limits the role of intellectual labour; the emphasis on perceptual-epistemic factors in Kuhnian paradigms that neglects the economic, technological and institutional determinants of scientific revolutions; and the distinction between discursive and non-discursive practices that condemns Foucauldian analysis to the interior description of discourse. Fleck's writings were primarily focused on the interactive cognition of scientific communities, but his accounts of 16th century anatomical innovations show that he applied his concepts to broader cultural transformations. In its most developed form (1936), Fleck's theory argues that cultural change is triggered by the emergence of new thought styles. A thought collective is defined as a community that cognizes the world in a certain way due to common training, values, problems, interests etc., and which can communicate its ideas in a relatively straightforward manner. However, concepts begin to transform when they are communicated across distances: from experts to the layfolk, from one discipline to another, across time, etc. Such transformations add to the existing fund of knowledge and allow new perceptions to emerge. Fleck's interactive social and comparative epistemology, focused on the external determinants of cognition and communicative transformation, allows a broad range of factors to be investigated. His key concepts – e.g. the circulation of ideas, intellectual unrest, proto-ideas – provide a flexible and open framework for cognizing research material.

Nevertheless, the thesis also argues that elements of Fleck's theory require correction and supplementation. For example, his problematic conception of general thought collectives (nation, class) can be reformulated as discursive constructs that circulate in the existing fund of knowledge. Thus, following the example of Afeltowicz and Sojak (2015), I draw on Bourdieu's concept of the field of cultural production a space of struggle and contestation, and Laclau and Mouffe's concept of differential articulatory practices.

The thesis applies Fleck's theory to investigate the following transformations: the emergence of philosophy as a cultural practice in ancient Athens; the appropriation and adaptation of Athenian philosophy in the late Roman Republic; Hegel's treatment of *paideia* as

an earlier form of *Bildung*; the rise of the philosophy faculty in the German University; and the multidimensional conflicts of the European Enlightenment.

Throughout the thesis, consideration is also given to the frameworks employed in a wide range of scholarship that reduced cultural change to straightforward switches and binary oppositions: e.g. the 'from myth to logos paradigm' suggesting that ancient Greek society underwent a transformation from traditional-religious culture based on mythopoetic accounts of the world to a rational-scientific culture based on logical argumentation and justification; the positioning of Socrates as a rupture in the history of European thought; and the Enlightenment vs. Counter-Enlightenment that depicts a binary struggle between two intellectual camps: the bourgeois public sphere and the traditional authorities. At the same time, the analysis continually draws on studies from the fields of academic philosophy, discourse analysis, and various branches of historical studies (e.g. ancient, cultural, economic, institutional, medical) that are sensitive to the heterogeneity and complexity of the phenomena under investigation.

Streszczenie

Niniejsza praca ma na celu ukazanie, że teoria kolektywów myślowych i stylów myślowych Ludwika Flecka może posłużyć do wyjaśnienia tych aspektów zmiany kulturowej, które umykają alternatywnym teoriom i modelom.

Punktem wyjścia argumentacji jest omówienie niedostatków teorii, które redukują zmianę kulturową do pojedynczych determinantów: Marksowskich determinizmu ekonomicznego i dychotomicznego podziału na bazę i nadbudowę, umniejszających rolę pracy intelektualnej; znaczenia, jakie mają czynniki percepcyjno-epistemiczne w Kuhnowskiej koncepcji paradygmatów, przez co pominięty zostaje wpływ czynników ekonomicznych, technologicznych i instytucjonalnych na rewolucje naukowe; oraz rozróżnienie między praktykami dyskursywnymi a niedyskursywnymi, które ogranicza Foucaultowską analizę do wewnętrznego opisu dyskursu.

Pisma Flecka skupiały się przede wszystkim na interaktywnym poznaniu w ramach wspólnot naukowych. Natomiast jego opisy innowacji w XVI-wiecznej anatomii pokazują, że swoje koncepcje stosował również do szerszych transformacji kulturowych. W swojej dojrzałej postaci (1936), teoria Flecka wskazuje na wyłanianie się nowych stylów myślowych jako katalizator zmiany kulturowej. Kolektyw myślowy zostaje zdefiniowany jako wspólnota, która dzięki współdzielonym wartościom, problemom, interesom, socjalizacji, etc. poznaje świat w określony sposób, jak również komunikuje swoje idee stosunkowo bezpośrednio. Pomimo tego, pojęcia zaczynają się przekształcać, gdy ich komunikacja przebiega na większy dystans: od eksperta do laika; z jednej dyscypliny do drugiej czy po prostu dystans czasowy, etc. Tego typu przekształcenia stają się częścią ugruntowanej już wiedzy i pozwalają na wyłonienie się nowych sposobów postrzegania. Interaktywna epistemologia społeczna i porównawcza Flecka, skupiająca się na zewnętrznych determinantach poznania i transformacjach komunikacyjnych, pozwala na badanie szerokiego spektrum czynników. Jego kluczowe pojęcia – takie jak krążenie idei, niepokój intelektualny czy preidee – składają się na elastyczną i otwartą ramę teoretyczną w odniesieniu do materiału badawczego.

Pomimo tego praca dowodzi również, że elementy Fleckowskiej teorii wymają korekty i uzupełnienia. Dla przykładu, jego kontrowersyjna koncepcja powszechnych kolektywów myślowych (naród, klasa) może zostać przeformułowana jako dyskursywny konstrukt, który cyrkuluje w ramach zastanej już wiedzy. Tym samym, idąc w ślady Afeltowicza i Sojaka (2015), niniejsza praca wykorzystuje koncepcję pola produkcji kulturowej jako przestrzeni

konfliktu i kontestacji Bourdieu, jak również koncepcję różnicujących praktyk artykulacji Laclau i Mouffe.

Teoria Flecka zostaje wreszcie wykorzystana do zbadania następujących transformacji: wyłonienia się filozofii jako praktyki kulturowej w antycznych Atenach; przywłaszczenia i adaptacji filozofii ateńskiej w późnej Republice Rzymskiej; Heglowskiego ujęcia *paidei* jako wczesnej formy *Bildung*; wyłonienia się fakultetu filozofii na uniwersytecie niemieckim; jak również wielowymiarowych konfliktów w ramach europejskiego oświecenia.

W całej rozprawie pojawiają się również uwagi pod adresem stanowisk teoretycznych stosowanych w różnorodnych badaniach, które redukują zmianę kulturową do uproszczonych ujęć zmian i opozycji binarnych: na przykład paradygmat „od mitu do logosu" sugerujący, że starożytne społeczeństwo greckie doświadczyło przejścia od kultury tradycyjno-religijnej, zakorzenionej w mitopoetycznych opisach świata, do kultury racjonalno-naukowej, opartej na logicznej argumentacji i uzasadnianiu; rozumienie Sokratesa jako przełomu w historii myśli europejskiej; oraz przeciwstawienie oświecenia kontroświeceniu, które sprowadza się do binarnej walki między dwoma obozami intelektualnymi: burżuazyjną sferą publiczną i tradycjonalistyczną władzą. Jednocześnie analiza nieustannie czerpie z badań z zakresu filozofii akademickiej, analizy dyskursu i różnych gałęzi studiów historycznych (np. starożytnych, kulturowych, gospodarczych, instytucjonalnych, medycznych), które są wyczulone na heterogeniczność i złożoność badanych zjawisk.

CONTENTS

Part One: Theory and Methodology

Chapter 1: Introduction – research problems and hypotheses

1.1 Research Problems and Proposed Solutions

The diverse traditions, discourses and disciplines that have endeavoured to put forward competing images and accounts of the various strands of European history agree on one point: periods of revolutionary change led to fundamental transformations in European cultures and societies. There is also a broad consensus that the technoscientific innovations and cultural changes which emerged in Europe in the Renaissance, and thus at the onset of modernity, ultimately led to the imposition and triggering of change across the globe, through the processes and mechanisms of colonization. Hence Europe is unanimously viewed as an entity that has come to be defined by its historical development—one which was cumulatively and fundamentally reshaped by core transformations; and then it is designated as an agent and disseminator of global change. However, the consensus evaporates when attention turns to how and why these changes occurred, how they can be (or should be) understood and explained, and how they ought to be evaluated.

The idea for this thesis arose from dissatisfaction with the available frameworks for investigating revolutionary cultural change, here defined as the complex set of developments and transformations—epistemic, discursive, economic, scientific, technological, informational, institutional etc.—that cumulatively lead to fundamental changes in a culture's value system and social practices. The existing frameworks tend to a) focus exclusively—and often reductively—on one overriding determinant, and/or b) uncritically apply established binary categories.

1.2 Problem 1: Exclusive Focus on One Determinant of Change

Examples of this tendency could include Marxian economic determinism, Kuhnian paradigms, and Foucauldian discourse analysis. Of course, these theoretical frameworks are entangled in immense complexities and have generated a great deal of scholarly debate and analysis. They will be subjected to more rigorous and detailed analysis in Chapter 3, so the following paragraphs merely aim to signal rudimentary orientations.

1.2.1 Marxian Economic Determinism

In 1859, Karl Marx famously introduced the distinction between the "economic foundation" and the "superstructure" of social, political, legal and intellectual life in the context of change: "The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure" (Marx, A Contribution to the Critique of Political Economy 1859 [1987], 263). Thus, Marx's binary framework—which became cemented as the classic base/superstructure distinction—positions the changes occurring in the material forces of production as primary, and the transformations and processes occurring in the superstructure— interpreted as the cultural and political sphere, e.g. (Cohen 1978) (Eagleton 2011)—as secondary, derivative and delayed. This model of determination amplifies the role of economic development while reducing the capacity for intellectual communication to contribute to fundamental cultural transformations. This framework is fully consistent with the binary schema outlined in *The German Ideology* (1846), which casts material activity and behaviour as primary, and mental production, "as expressed in the language of politics, laws, morality, religion, metaphysics etc. of a people", as secondary (Marx Engels 2011, 14). On the one hand, there is life, physical matter, and productive activity; and on the other, there is *consciousness of* this life, matter, activity etc. At best, before the division of labour, thinking and mental intercourse was interwoven with real life, as a "direct efflux"; but after the division of labour and the emergence of class conflict, mental labour and production are monopolized by the ruling class, used as instruments of mastery, and thoroughly determined by economic interests (Marx Engels 2011, 39-41). Within this framework, revolutionary cultural change, such as that manifested in the dissemination of revolutionary ideas, is only possible if there have been revolutionary transformations in the economic base, which have created a new class (the bourgeoisie, the proletariat).

Marxist economism was subjected to profound critique by both Weber and Gramsci, but Lenin's rejection of the exclusive emphasis on economic determinism is also illuminating. While the role of the intelligentsia in contributing to revolutionary change is a controversial issue with a long and complex history in the Marxist tradition, Lenin's main innovative contribution to Marxist theory, namely his conception of the Party as a "vanguard" that instigates revolutionary change through educating workers, was explicitly introduced to counter the narrow framework of the prevailing Marxist economism. In Lenin's diagnosis, changes to political consciousness had to come "from without" the economic struggle, through the activity

of a group of theoreticians, propagandists, agitators and organizers (Lenin 1961, 421-3). In other words, the most significant modification of the Marxian framework amplified mental labour and education as essential contributors to political change. Of course, Lenin's revision of the economistic theoretical framework was made to bring about political change in a specific context, rather than to study and account for more broadly conceived cultural change, which makes application of the Leninist program to the investigation of cultural phenomena somewhat problematic. What is worth bearing in mind, though, is that his program recognized the potential for an organized social group to intentionally instigate revolutionary change through mental labour and the dissemination of knowledge through the social field.

1.2.2 Kuhnian Paradigm Shifts

Thomas S. Kuhn's theory of paradigm shifts originated from his analysis of *The Copernican Revolution* (1957), which sought to account for the process by which Copernicus' technical rejection of Ptolemaic astronomy would eventually lead to a complete change in the European worldview. From the outset, Kuhn's investigations highlighted that scientific revolutions are, firstly, deeply embedded in cultural change and, secondly, that they can themselves be the triggers for far-reaching cultural change. However, while implicitly opposing the Popperian emphasis on the epistemic innovations of bold scientific geniuses, and while reframing science as collective-institutional practice based on consensus, Kuhn's paradigm shift framework is also predominantly focused on perceptual-epistemic factors—those that are adduced as undermining consensus and leading to innovation and change. A new paradigm is framed as emerging primarily due to an intolerable accumulation of anomalies and a loss of predictive capacity, and while the cultural and psychological importance of a paradigm is acknowledged, only cursory consideration is given to the impact of broader social developments, technological innovation, and economic factors, on a paradigm shift. For example, in *The Copernican Revolution*, Kuhn briefly acknowledges that the Protestant Reformation and the "general ferment" facilitated Copernicus' innovation; that voyages and exploration drove the need for better maps and star charts (thus implicitly recognizing that scientific innovation is subject to the law of supply and demand); and that Copernicus became involved in calendar reform because there was a pressing social need for precise dating. Yet Kuhn makes no precise analysis of how these factors may have influenced the Copernican paradigm shift: in a book totalling nearly three hundred pages, just two or three pages were devoted to these socio-economic

determinants (Kuhn 1957, 124-6). At the same time, no attention is paid to the print and publishing explosion which transformed Europe during Copernicus' lifetime, by spreading Luther's Reformation; and which is registered in the shift from Copernicus' hand-written *Commentariolus* (1509-14), circulated among friends, to the publication of *De revolutionibus orbium coelestium* (1543), published by a German Protestant, in Wittenberg, a bastion of Protestantism. Furthermore, no consideration is given to the direct impact that the many years Copernicus spent at the Universities of Bologna and Padua may have had on his astronomical innovations: yet the University of Padua was renowned for its tolerance, cutting-edge humanist curricula, and stimulating teaching methods. One of the central arguments of the present study is that educational institutions have a tangible impact on epistemic innovation, and that the extent to which institutions suppress, constrain, allow, encourage and instigate the development of new thought styles has a direct and demonstrable influence on broader cultural change. In other words, the years that Copernicus spent studying medicine at the University Padua in 1501-03 were a direct determinant of the bold hypotheses that he put forward in his *Commentariolus* (1509-14) (Dersley 2015 a; 2015b).

Kuhn's *The Structure of Scientific Revolutions* argues that paradigms direct scientists' focus and determine their choices: a paradigm sets the problem to be solved (Kuhn 1962, 25-7). Yet science is not a purely theoretical problem-solving activity: it is a practice that serves and is directed by socio-economic needs and interests. Thus, by amplifying epistemic determinants, Kuhn's account of scientific revolutions manages to maintain exclusive focus on their internal structure, effectively sealing off laboratories, universities, disciplines, theories, chemists and physicists from the world outside. In this sense, Kuhn's examination of the structure of scientific revolutions, was—like Ernst Mach's accounts of the conceptual evolution of science—a fundamentally *internal* account of scientific revolutions. It is an image of science that is untainted by any grubby involvement in industrial and military application. However, the scientists that populate Kuhn's *Structure* were embedded in societies at various stages of capitalist development, and the emergence of chemistry and thermodynamics as new disciplines at the turn of the nineteenth is inseparable from the needs of the industrial revolution, hence capitalist modes of production (Marx's economic foundation) have to be considered as external determinants of paradigm change. If a paradigm sets the problems to be solved, there is a society and an economic system that requires these solutions, and which funds laboratories, research programs, university departments etc. to attain them.

1.2.3 Foucauldian Discourse Analysis

When Foucault turns to the problem of change and transformation in *The Archaeology of Knowledge* (1969 [1989]), he contrasts the history of ideas with "the archaeological description of change" (183). The former is characterized as seeking continuity, linear causality, homogenous process, and cumulative evolution, while the discursive analysis of archaeology searches for discontinuity, rupture, breaks, and the emergence of new formations. Where the history of ideas treats change as container, and thus its statements construct historical periods through articulating "the abstract unity of change and event" (1989, 195), archaeology disarticulates the linear unity of history to identify systems of transformation. New discourses and discursive formations emerge, as "positivities", through processes of differentiation, interrelation and dispersion, which give rise to new rules of enunciation and formation. Thus, for Foucault, Marx's critique of political economy is a new discourse that occurred through differentiation from Ricardian political economy: Marx's critique employs the same concepts as classical political economy (surplus value, falling rate of profit) but it constitutes a new discursive practice by virtue of defining "the conditions in which the discourse of economists takes place" (1969 [1989], 194-5). Thus, the shift from political economy to the critique of political economy—irrespective of whether this is framed as a change, transformation or rupture—constitutes the emergence of something new in the discursive field.

Foucault's framework can robustly account for discursive transformation, but ambiguity arises when it is applied to phenomena that Foucault defines as external to discourse: non-discursive practices and events. According to Foucault, the emergence of the Analysis of Wealth as a discursive formation in the 17th century was "linked with a great many conditions and non-discursive practices", such as "the circulation of goods, monetary manipulations and their effects, the system of protecting trade and manufactures, fluctuations in the quantity of metal coined" (1969 [1989], 193). Foucauldian discourse is narrowly defined: it is constituted by statements—relations between statements, the rules for the enunciation of statements, the rules and relations that make a discursive practice possible etc. Ultimately, Foucauldian discourse traps itself in a binary framework: certain phenomena that are not constituted by statements (e.g. money and monetary manipulations, economic systems) are defined as non-discursive practices. Yet cultures assign meaning to such phenomena: money is embedded in meaning systems, the value that it encodes is defined and constrained by semiotic regimes (e.g. decimal numerals). Thus, within the Foucauldian archaeological framework, discourse is

determined by changes occurring in meaning systems and social practices that lie, by definition, beyond the discursive sphere. In Foucault's account of change and transformation from *The Archaeology of Knowledge*, the relationship between discursive practices and non-discursive practices is not clearly defined, but the comments on the Analysis of Wealth suggest that discourse—like Marx's superstructure—registers a delayed response to transformations and developments in the non-discursive field. Yet, as far as I can tell, there is no clearly defined feedback mechanism whereby discursive practice could instigate change in a non-discursive practice such as monetary manipulation.

Similar ambiguities arise with Foucault's assertion that the French Revolution is not "an event exterior to discourse". Instead, he frames it as a "complex, articulated, describable group of transformations" that, among other things, established new discursive formations (1969 [1989], 195). In this framing, the vast cultural ramifications of the French Revolution seem to be positioned entirely within the sphere of discourse, as a discursively constructed set of transformations. It is Foucault's binary distinction between discursive and non-discursive practices that makes this framing problematic: if the French Revolution was constructed in the field of discourse (statements, texts, knowledge productions systems), then—in the terms of Foucault's framework—this field must have been determined by extra-discursive factors and non-discursive meaning systems (e.g. economic factors—such crop failures—that determine a rise in the price of bread before this rise is registered or accounted for in any textual system; and demographic factors, namely huge population growth). What is not clear is how discursive statements pertaining to the revolution relate to such extra- and non-discursive factors. In Foucault's archaeological account of transformation, discourse is both amplified and constrained as a determinant, while the communicative agency of groups and individuals is minimized, and the role of non-textual codings and techno-economic factors, are rendered deeply ambiguous.[1]

1.2.4 Proposed Solution to Problem 1: Fleck's theory

This is not to argue that the Marxian, Kuhnian and Foucauldian frameworks do not shed valuable light on aspects of cultural change, or that their frameworks are 'incorrect' and should

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[1] Foucault's unsatisfying account of change is mentioned by Edward W. Said, who suggests that his interest in rules "is part of the reason why Foucault is unable to deal with, or provide an account of, historical change" . This is partly attributed to Foucault's suppression of the individual subject, who is overwhelmed by the descriptive statements of discourse and whose agancy is replaced by the rules discursive formation. In Said's view, individual subjects and wills can leave their determining imprint on discourse (2003, 23), which suggests individual will has to be taken into consideration when accounting for historical change.

be abandoned. It is acknowledged that the concepts deployed within these frameworks have undeniable explanatory power when applied to various transformations occurring in the socio-cultural field. The argument is rather that by amplifying certain determinants, they exclude, downplay or distort others. This thesis argues that Fleck's theory of *thought collectives* and *thought styles* is robust and flexible enough firstly to shed light on aspects of cultural change that elude these frameworks, and secondly, that it can be combined with conceptual tools from other theoretical frameworks which thus increase its explanatory power.

Fleck's theory posits that all perception and cognition are socially determined (1929 [1979], 49) (1935a [1979], 38). This determination occurs in the interaction between "*thought collectives* and *passive elements*" (1935a [1979], 40): a community draws on the existing fund of knowledge (1935a [1979], 10, 38) to apply arbitrary conventions in the interactive process of perception and cognition. If conventions are constructed arbitrarily, with an element of "free choice" (measurement can be made in inches or centimetres), the choice of convention is determined by social factors (imperial system vs. metric system), and measurements reveal non-arbitrary relations between what is measured (a horse will be taller than a cat, no matter which system is used). It is this combination of arbitrary and non-arbitrary determinants that gives Fleck's theory its robustness and flexibility. When a thought collective develops a new system of measurement, or a method for testing an aspect of the world, a range of determinants can be identified as conditioning this transformation (and can be accessed by some of Fleck's key concepts): the *existing fund of knowledge* (previous conventions, including *proto-ideas*); the contributions of individual geniuses; social and political needs and factors (*intellectual unrest*, *collective mood*); technological developments and possibilities (*social forces*); and communication between thought collectives (*the circulation of ideas*).

Fleck's concepts can be treated as general levers that pry open fields of determination, which can then be analysed in more detail. Some overlap with the abovementioned models can be construed. For example, "the existing fund of knowledge" (*Wissensbestand*) (Fleck 1935a [1979], 38) can be viewed as designating a conceptual terrain that is similar to Foucauldian discourse; "intellectual unrest" (Fleck 1935b [1979], 74-75) can be viewed as indicating the same phenomena that the Marxian concept of ideological conflict tackles; and there are obvious similarities between Fleck's concept of a thought style and Kuhn's paradigms, since they are both collective epistemic frameworks that determine what an individual can see or think, and both concepts emphasize the social character of scientific activity (Fleck 1935a [1979], 38-42).

However, in contrast to Marxist economic determinism and Foucauldian discourse, it bears emphasizing that Fleck's theory is fundamentally *epistemological*, being focused on

cognition as a social activity. Thus, while the Marxist framework reduces cognition to a (mostly and problematically 'false') reflection of underlying processes, and while Foucauldian discourse buries the subject in an educational, institutional and bureaucratic infrastructure and treats discourses as autonomous supra-individual cultural entities, Fleck's theory entails that all theories, ideologies and discourses are the products of cognizers: texts, institutions and discourses are produced and maintained in social acts of cognition. Without constant acts of cognition and recognition, books are just paper with indecipherable marks; universities just containers made from brick and mortar. Thus while Vesalius – to use Fleck's example – can be assigned to a privileged professional class, and while the institutional influences of the Universities of Bologna and Padua are clearly evident in his practices, as are the impact of printing innovations and the development of the social networks associated with the publishing trade, Fleck's theory necessitates considering all these factors in terms of their impact on collective cognition. In other words, what were the factors that led Vesalius to perceive, represent and describe the human body in such a way, and that allowed his students and the reading public to accept and adopt this way of cognizing the human body?

The key elements of Fleck's theory are analysed in more detail in Chapters 2 and 3. However, the suggestion made at this point is that Fleck's theory allows consideration of economic, technological, discursive, and epistemic determinants when accounting for cultural change, via the concepts of thought collectives and thought styles, the existing fund of knowledge, intellectual unrest, and social forces, and additionally allows other determinants to be considered through the application of other concepts, such as the circulation of ideas between thought collectives. This flexibility and range give Fleck's theory its unique explanatory power.

The criterium of explanatory power is taken from Leszek Nowak's idealizational theory of science, and in particular his model for evaluating competing theories (paradigms) in the social sciences. Nowak defines explanatory power as "the proportion of facts explained by the theory to the facts in a given domain" (Nowak 2012, 38). Thus, Fleck's theory of *thought collectives* and *thought styles* can be compared with other frameworks that account for cultural change in terms of the proportion of the facts explained. However, rather than focus on the proportion of facts and employ a quantitative criteria, this thesis is more focused on highlighting 'new' facts. In other word, if Fleck's theory allows for the consideration of 'facts' that other frameworks exclude, ignore or suppress, then it can be said to have a demonstrable advantage in terms of explanatory power.

This issue opens up another level of reflexive complexity, however, since Fleck's theory posits that facts have a genesis and development: facts do not lie in wait in the natural world or

social field, patiently biding their time until they are discovered and explained by researchers. In Fleck's model of cognition, facts are generated through the interaction between non-arbitrary "passive elements" and the arbitrary conventions constructed and employed by a thought collective when it draws on the existing fund of knowledge (1935a [1979], 10, 38). Thus, when applying Fleck's theory to cultural change, the researcher is necessarily—in accordance with Fleck's concepts—involved in both analysing facts (that have been constructed, established and subjected to conflicting interpretation) and reconstructing facts in the process of interacting with the research material.

The research of distant thought collectives has to steer between two ever-present dangers: on the one hand, uncritically applying concepts and categorizations that have been inherited from the research material under study, and on the other hand, uncritically projecting contemporary frameworks and categories back into the past. Fleck's theory insists that researchers are unable to dispense with their own thought style when cognizing another thought style, thus anachronistic projections are inevitable when identifying and studying thought collectives from the distant past. However, analysis of existing accounts show that there is a great deal of difference between maximal projections that appropriate the thought of earlier collectives for present purposes (e.g. Hegel's history of philosophy) and more curious and sensitive projections that apply contemporary concepts in order to open up and follow the complex heterogeneity of the cultural phenomena under study. Fleck's notion of comparative epistemology is crucial in this regard: researchers cannot discard their own thought styles, but they can use them to *compare* past representations and concepts, and thereby identify different and emergent styles. Ultimately, despite such reflexive entanglements, the claims of this thesis are (perhaps) modest: if Fleck's theory can be used to shed light on aspects of facts (constructed, reconstructed) that are blocked by other frameworks, then it will be possible to claim that it has a certain explanatory power that other frameworks lack.

1.3 Problem 2: The Application of Entrenched Binary Frameworks and Categories

As Chapters 4, 5 and 6 will attempt to show in more detail, there is a tendency for the study of cultural change to rearticulate inherited binary frameworks and categories that have become established through accreted layers of scholarly discourse and institutionalized disciplines. Some examples of such entrenchment are:

A. the "from myth to logos paradigm" that was instrumental for grounding many disciplines and defining their research fields (philosophy, classical studies, anthropology, literary studies, etc.);

B. 'the Socratic caesura' (Laks 2018), through which philosophers—from Plato and Cicero, through to Schleiermacher and Nietzsche—identified the arrival of Socrates as a discontinuity or rupture in the history of philosophy, with the term 'Presocratic philosophy' (*vorsokratische Philosophie*) institutionalizing a before-and-after framework;

C. the classic Enlightenment/Counter-Enlightenment dichotomy which framed historical studies of the German *Aufklärung* and more general images of intellectual currents in the nineteenth and twentieth centuries, which continue to haunt both scholarly and popular discourses to this day.[2]

1.3.1 'From myth to logos'

This binary switch applies to and constructs a transformation that occurred in Ancient Greece between the seventh and fourth centuries BC, registered and epitomized by the transition from the poetry of Homer and Hesiod, via the proto-philosophy of Milesians and other 'Presocratics', to the Attic philosophy of Socrates, Plato and Aristotle. The 'from myth to logos' framework was explicitly constructed in the 19th and 20th centuries, and can be viewed as a reductive and deeply entangled summary of the phase of European self-reflection that had occurred during 'the Enlightenment' (following earlier phases of self-reflection triggered by comparisons with Antiquity during 'the Renaissance'). As the reflective representatives of European cultures perceived themselves to be in the midst of far-reaching transformations—most obviously manifested in the secularization processes whereby Christian institutions lost control over thought, cultural production and social practices, and the attendant rise of science and ostensibly new forms of rationality—attention once again turned to Antiquity, where similar transformations were perceived to have occurred. While English and French reflection tended to focus on Roman antiquity, as furnishing examples of possible decline, as well of political organization and civic virtue, scholars embedded in the German Universities concentrated on Ancient Greece as an object of study and model for differential identity construction. Thus, the construction of Ancient Greece as a field of knowledge production was inseparable from

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[2] Steven Pinker's *Enlightenment Now* (2018), especially Chapters 3, and 20-23, is an example of a popular re-enactment of this dichotomy. For a more scholarly reiteration, see Graeme Garrard's *Counter Enlightenments. From the eighteenth century to the present* (2006).

processes of self-reflection and identity formation at the local, national and continental level (Marchand 1996) (Hofstetter 2001). The transformations of Modernity were projected into Antiquity, and an analogue for the European switch to demystified, enlightened rationality was found in Ancient Greece.

The culmination of Modernity's construction and conceptual exploitation of antiquity for identity construction purposes is found in the philosophy of G.W.F. Hegel, particularly in his *Lectures of the History of Philosophy* (1806-31), where German philosophy is identified as the true heir of Greek philosophy and the Greek concept of *paideia* is treated as an earlier version of the German *Bildung* ideal. Hegel's re-enactment of the banishment of myth and poetry from *The Republic* was actually more severe than the judgment delivered in Plato's text, since it sought to utterly cleanse philosophy of *mimesis*. As will be shown in Chapter 5, Hegel's differentiation of the type of thought that emerged in Greek philosophy as being absolutely and qualitatively different from the thought that was present in Greek mythology and religion (Hegel 2009, 78-9) was part of a strategy that opposed the interdisciplinary approach of his friend and colleague, Georg Friedrich Creuzer. In his hugely controversial *Symbolik und Mythologie der alten Völker, besonders der Griechen* (1810-12), Creuzer treated rationality as continuum: there were rational elements hidden in "theomyths", thus there was no absolute dividing line between mythology and philosophy. Hegel accepted that mythology and religion contained "philosophical themes" but excluded them from philosophy by means of a key demarcating binary: philosophical themes are *hidden* in myth, religion and poetry, because they are shrouded in *mimesis*, but in philosophy, such themes are "out in the open"—they "have attained consciousness in the form of thought", and are free of all sensuous imagery Hegel 2009, 84-5). Thus, for Hegel, philosophy emerged as a discontinuity, constituted by thought beginning to think about thought, as knowledge about knowledge, and this demarcation consolidated the role and position of scholarly philosophy within the German University, as a discipline superior to and distinct from all others.

Whereas Hegel consistently and brutally appropriated the concepts of Athenian Philosophy for the purposes of his own dialectical project, mainstream scholarly philosophy has, from the 19th century through to the 21st century, tended to uncritically perpetuate the binary distinctions introduced by Athenian philosophers in the 5th and 4th centuries BC and projected them back into the pre-Platonic cultural field. When the Milesian cosmologists are identified as "the fathers of rational thought", and Hesiod's *Theogony* is classed as "unargued fables" (Barnes 1979, 3, see also Kirk-Raven-Schofield 1983; Cohen et al. 2011), these strategies replicate Plato's categories, which were developed to reduce heterogenous narratives

and forms of cultural production to one homogenous category: *mythos*. As will be shown in Chapter 4, Plato's reductive distinctions and value-laden binaries were tactically deployed in a discursive conflict concerning social and educational practices, and they were inseparably bound up with an attempt to assert Athenian hegemony in the cultural field after the Athenian Empire lost its hegemony as a result of the devastating Peloponnesian War. As such, Plato's quarrels with rhetoric and poetry are strategically justified. However, it is harder to understand why modern scholars, from William Nestle (1940), through W.K.C. Guthrie (1953), Jonathan Barnes (1979) and Kirk-Raven-Schofield (1983), to Cohen et al. (2011), propagated and perpetuated the triumphalist 'from myth to logos' account of Greek thought. The lack of critical reflection involved in such application of inherited categories was hammered home by Jean-Pierre Vernant: "Here again modern scholars have simply followed in the footsteps of the ancient authors, remaining in a sense a part of the classical tradition that they had set out to study" (Vernant 1988, 220).

This disciplinary entrenchment was maintained in the face of several key works that investigated a range of determinants that shaped Ancient Greek thought, such as: F.M. Cornford (1912) and Werner Jaeger's (1947) focus on the "theological" content of Milesian thought; Eric A. Havelock's provocative argument (1963) that the famous quarrel between poetry and philosophy in Plato's *Republic* fundamentally concerned a conflict between written and oral cultures; G.E.R. Lloyd's meticulous analysis of the development and dispersion of rational demonstration across many areas of social life and knowledge, e.g., politics, law, medicine, astronomy (1979); Vernant's thesis that the agonistic conception of social life, and the competition associated with public debate in the Greek *polis*, led to the emergence of rational argumentation (1988), and Gregory Vlastos' (1947) and Michael Gagarin's (1986) (2002) suggestions that the introduction of written law codes and compulsory judicial procedure significantly shaped the development of early Greek thought. A state-of-the-art example of the interdisciplinary and reflective approach to the investigation of "Presocratic Philosophy" is provided by André Laks (2018), who critically surveys—among many others—the work of Lloyd and Vernant, and intriguingly applies Weber's complex model of rationality to explain the heterogeneity and differentiation that characterizes "Presocratic philosophy". All these works resisted the tendency to explain cultural change by invoking the arrival of a miraculous discontinuity, a simple epistemic switch from *mythos* to *logos*, and instead focused on gradual mutation and dispersion, investigated the set of determinants that shaped epistemic innovations, and highlighted the socio-cultural conflicts that these innovations were embroiled in.

1.3.2 The Enlightenment/Counter-Enlightenment dichotomy

The rise of the philosophy faculty within the German University, from a position of subservience to the higher faculties (and particularly to the theology faculty) from the 13th century right through to the 1790s, to a position of supremacy as the master discipline within the Humboldtian university at the start of the 19th century, was embedded within complex processes of transformation—economic, social, cultural, institutional. The conflict accompanying these changes became explicit in the 1790s, as is reflected and expressed in key source texts: Johann Christoph Woellner's *Edict on Religion* and *Edict on Censorship* of 1788, Kant's *Religion within the Bounds of Mere Reason* (1793), Woellner's official reprimand of Kant in the *Royal Proclamation of 1794*, and Kant's *The Conflict of the Faculties* (1794-98). In essence, the texts are focused on the issue of *control*—of religious teaching, of communication in public sphere, of the University, and of the philosophy faculty. For Kant, the fundamental issue at stake in the conflict was the control of thought itself, since "the constraint which deprives people of the freedom to *communicate* their thoughts in public also removes their freedom of *thought*" (Kant 1970, 247).

In the scholarly literature, the conflict has been framed in two ways: firstly as "the classic Enlightenment/Counter-Enlightenment dichotomy" (Sauter 2009, 7), which casts Frederick the Great, Baron von Zedlitz and Kant as the good guys, on the side of freedom of thought, liberalism and progress, while Frederick William II and Johann Christoph Woellner are presented as the bad guys, on the side of control, censorship, orthodoxy, obscurantism and conservatism. This perspective is articulated in the scholarly works of Friedrich Paulsen (1902), Paul Schwartz (1925), Mary J. Gregor (1979) and Christina Stange-Fayos (2003).

The representatives of an alternative approach, such as Klaus Epstein (1966), Joachim Whaley (1981), T.C.W. Blanning (1981), James Schmidt (1996), John Christian Laursen (1996), and Michael Sauter (2009), have focused on the unique nature of the German *Aufklärung* and highlighted aspects and complexities that elude capture within the neat and reductive Enlightenment/Counter-Enlightenment binary. For example, Epstein's *The Genesis of German Conservatism* reconstructed the social field in the late eighteenth German states to highlight how support for aspects of the *Aufklärung* was expressed—with varying degrees of ambivalence—by diverse and distinct social groups, ranging from impoverished students ("the academic proletariat"), through 'liberal' professors and pastors, to monarchs like Frederick II who espoused "enlightened absolutism"; while the groups that constituted opposition to the *Aufklärung*—unconsciously or consciously—included the peasantry, guild masters, the officer

corps and the aristocracy. Whaley and Blanning emphasize that the German Universities, which played a unique and key role in disseminating the *Aufklärung*, did not just passively receive the ideas of the English and French Enlightenments: they selected ideas that could be incorporated into domestic intellectual currents. For example, the cameralist philosophy—which treated education as a means of improving the efficient, rational functioning of the state, and was geared to preparing students for service in the bureaucracy and military—was fully compatible with Enlightenment notions of progress and social utility. Schmidt's collection *What is Enlightenment?* (1996) and his *Introduction* reconsider and explore the uniquely German debate on the nature and limits of the Enlightenment that took place in the public sphere in the 1780s and 90s. The collection contains source texts and contextual analyses, such as Laursen's 'The Subversive Kant: The Vocabulary of "Public" and "Publicity"', which attempt to cut through layers of scholarly discourse and allow the source texts to speak for themselves, in a sense, by casting light on their shifting terminology, intertextual conflicts and communicative purposes. The complexity is aptly summarized by Schmidt:

> Because we tend to assume a natural affinity between the Enlightenment and liberal politics, we forget that many *Aufklärers* were not liberals, that some of the more ardent liberals were by no means well disposed toward the Enlightenment, and that it was by no means assumed that political revolution was a means for advancing the cause of enlightened political reforms. (Schmidt 1996, 12)

Lastly, Sauter reframes the conflict between Kant and Woellner by situating it within two intersecting antagonisms: firstly, Kant and Woellner were members of "the educated elite" who exerted control over "the common folk"; and secondly, they belonged to rival groups within the educated elite that articulated competing visions of the Enlightenment, with particularly divisive antagonism focused on the issue of how the public sphere and debate should be controlled. To label Woellner's *Edicts* and *Proclamation* against Kant as texts that simply advocated 'Counter-Enlightenment' policies ignores the fact that Woellner's *Edict* attacks pastors for spreading errors under "the much abused banner of *Aufklärung*"—in other words, the issue was not the *Aufklärung* per se, but how it was interpreted, exploited and communicated to the public. Thus, in Sauter's reconstruction, and also following Laursen, Kant's *The Conflict of the Faculties* had a more limited aim than that espoused by Kant and the more liberal *Aufklärer* in the 1780s. Instead of arguing for the freedom of expression for all men of learning (*Gelehrten*) in the public sphere, as he had in 1784, prior to the French Revolution, by 1794-8 Kant was merely attempting to carve out a space of free enquiry for a narrow social group,

namely the philosophy faculty within Prussian universities, or for scholars from the higher faculties who exercised their rights as philosophers (Laursen 1996). Kant's narrower aims pragmatically reflect and respond to the assertion of greater state control over publishers and the universities, and the atmosphere of alarm as the French Revolution entered its phase of the Terror and began spilling across the continent in the form of war.

Thus the Enlightenment/Counter-Enlightenment dichotomy identifies two very general intellectual camps, with two antagonistic, diametrically opposed worldviews, and assigns individual texts and individuals to one or either side. In contrast, the other tendency in the scholarship identifies a variety of specific communicative networks and identifies a range of distinct positions that were articulated within the ruling class—the educated elite, which mainly consisted of men who held positions in state institutions.

1.3.4 Proposed Solutions to Problem 2 – Fleck's theory

In the models of 'the from myth to logos' paradigm, the Socratic caesura, and the 'Enlightenment vs. Counter-Enlightenment' dichotomy, cultural change is explicated through overly simplistic binary frameworks and switches: as an epistemic paradigm shift, a before-and-after discontinuity, and a Manichean struggle between two intellectual camps. In contrast, the alternative approaches mentioned above identify a complex array of interacting determinants and processes to construct a multidimensional image of socio-cultural change. While some authors, such as Vernant, Buxton and Sauter, have explicitly rejected binary frameworks, to the best of my knowledge there has been no attempt to provide an alternative theoretical framework that can be flexibly applied to diverse examples of cultural change.

Rather than positing a binary paradigm switch, absolute discontinuity or dialectical struggle, Fleck's theory suggests that far-reaching socio-cultural change occurs when a new thought style develops within an existing thought collective, which, in turn, through processes of differentiation, leads to the formation of new thought collectives. So, for example, applying Fleck's theory, it is possible to identify (bearing in mind the sedimented layers of construction and reconstruction) the gradual emergence and differentiation of new thought styles at specific historical moments: thus it can be suggested that the Socratic thought style emerged from within an oligarchic thought collective that emerged in opposition to the Athenian demokratia between 432 and 403; then the Platonic thought style can be viewed as emerging from the trauma of war and oligarchic coups, and which switched focus from political control to the control of cultural production. Neither of these thought styles is reducible to the specific individuals Socrates and Plato: they were collective phenomena, involving audience and reader interactions, an urban-

institutional context, conflict between traditional and new social practices, the technologies and relations of cultural production, and discursive antagonisms.

Given the collective nature of these phenomena, this thesis argues that Fleck's theory of thought collectives and thought styles provides a uniquely fitting conceptual framework for explaining various aspects of such cultural change. Fleck's theory is primarily focused on the workings of group perception and cognition, positing that one of the key determinants in the emergence of a new, distinct thought style is communication within a group and between groups ("the circulation of ideas" (Fleck 1936 [1986], 87)) (Sady 2000, 70-71). Fleck's example of this, which was particularly pertinent at the time when he was writing, i.e. 1936, is the concept of 'race'—a concept which "changed beyond recognition" when it was transferred from the natural sciences to the political sciences (1936 [1986], 88). When a concept developed by one thought collective—in this case a scholarly network or community—is transmitted to and adopted by other thought collectives, in this case a network of political theorists, activists and propagandists, it is inevitably transformed in the process, and furthermore, triggers change across the social field.

The scholarly accounts of both Ancient Greek thought and the German *Aufklärung* contain many examples of conceptual revolutions triggered by the migration of concepts from one field of knowledge production to another. For example, Anaximander's main conceptual innovation is constructed as taking the ideas of equality and justice that had been developed in the political and legal practices of the Greek *polis* and applying them to the conception of nature, which could then be conceived as an immanent "a self-regulative equilibrium" that no longer required intervention from external deities (Vlastos 1947). Or, as will be explored in more detail in Chapter 4, in Plato's *Republic* the banishment of 'poetry' involves the application of the procedure and concepts developed in the administration of justice to educational practices. When the innovations of Athenian law were transferred to the practice of philosophy, the process of weighing arguments and passing judgement was turned away from individual citizens and focused on entire fields of cultural production. The organization of European-Western knowledge production into hierarchical disciplines can be traced to this perennial tendency of thought collectives that self-identify as engaging in 'philosophy' to sit in judgement and evaluate other cultural practices, modes of explanation, and forms of cultural production.

Then, as Rebekka Horlacher convincingly argues (2017), the English 'philosophy of politeness' expounded in the writings of the third Earl of Shaftesbury in 1699-1712 became a key inspiration for the German ideal of *Bildung*. Shaftesbury's philosophy of politeness was embraced by English Whigs and the new merchant class as an alternative concept of virtue to

the traditional, heredity-based morality articulated by the Tory aristocracy. Lawrence E. Klein's study of Shaftesbury's project situated it within a broader development instigated by "Whig cultural ideologists" (1994, 9), best exemplified by Joseph Addison and Richard Steele's *Spectator* project: a Whiggish 'moral weekly' which was founded in 1711-12, focused on "manners, morals, and letters", and aimed at a broad reading public ranging from the gentry to merchants and professionals (Melton 2004, 95-97). Crucially, Shaftesbury's philosophy of politeness was inspired by a classicist revaluation of ancient moral philosophy as a fundamentally social activity: for Shaftesbury, the Socrates constructed by Xenophon and the Ciceronian version of "the Socratic *caesura*" (Laks 2018) embodied philosophy as the pursuit of self-knowledge and "self-actualization", rendered accessible to an audience of citizens through a convivial 'manner' and the practice of open conversation; while Xenophon was a "noble gentleman" who "combined the refinement of the gentleman with the solidity of the scholar" (Klein 1994, 43-44). Shaftesbury's notions of the 'self-educated gentleman' and 'self-formation' were presented as advice for individual writers (Shaftesbury 2012), yet when his 'forming' and 'formation' were translated into German as '*bilden*' and '*Bildung'* they were seized upon and developed in the ongoing debate and struggle over the purpose of education in the German principalities (Horlacher 2017). Although there are obvious social and political parallels between the English 'philosophy of politeness' and the German *Bildung* ideal, such as their classicist revaluation of antiquity, and their rejection of traditional hierarchies and assertion of a new value system, a key transformation occurred: the 'philosophy of politeness' was saturated with English individualism and was dispersed through entrepreneurial publications, whereas the concept of *Bildung* was predominantly developed within the philosophy faculties at German universities and was thus inseparable from considerations of how state institutions could foster individual self-formation.

These examples support Fleck's suggestion that changes in thought style are—at least in part—triggered by the circulation of ideas between thought collectives. The thought collectives that can be crudely identified here: 'the Milesian school', 'Athenian philosophy', 'English Whigs' and 'German philosophy faculties', all developed new thought styles through the adoption and repurposing of concepts from other fields. On this basis, it would be possible to claim that Fleck's theory 'fits the phenomena', or that it can produce an 'accurate' image of cultural change. However, the primary aim of this study is not to find examples of cultural change that confirm the truth of Fleck's theory, or even to that show Fleck's concepts fit the phenomena better than, for example, Kuhn's paradigms. To reiterate: the primary aim is to draw

on the explanatory power of Fleck's theory and to see whether it sheds new light on the phenomena and processes of cultural change.

Following Kuhn's 1976 *Foreword* to the English translation of *Genesis and Development of a Scientific Fact*, there was tendency in works from the fields of philosophy of science and science and technology studies to briefly acknowledge Fleck's thought and position him as an oddball precursor of the Kuhnian critique of science, constructionism, relativism, social epistemology etc. (see, for example, (Kuhn 1976) (Hacking 1999, 70-71) (Fuller 2006, 28)). However, in recent years attempts have been made to apply Fleck's theoretical tools to a range of phenomena, such as the development of scientific practice in 17th century England (Afeltowicz Sojak 2015), scientific images (Mößner 2016), and archaeological communities (Milosavljevic 2020), The present thesis follows the latter approach: the primary aim is to apply Fleck's theory to cultural phenomena, and any analysis of Fleck's theory is subordinate to this aim.

1.3.5 Necessary Supplements to Fleck's theory

While being robust and flexible, it has to be acknowledged that Fleck's theory is also rather skeletal, and when it is applied in any in-depth analysis of cultural phenomena it soon becomes apparent that the framework requires supplementation with other conceptual tools. The approach of combining Fleck's concepts with other theoretical tools was employed by Łukasz Afeltowicz and Radosław Sojak in *Arystokraci i rzemieślnicy. Synergia stylów badawczych* [Aristocrats and Craftsmen. The Synergy of Research Styles] (2015). These authors applied Fleck's concept of thought style, alongside Harrison C. White's network theory and Pierre Bourdieu's concept of habitus, to the development of science as a social practice in 17th century England. Though Fleck's concept of thought style is a crucial concept for explaining the cognitive contributions of the nobility, such as Robert Boyle's experimental method, Afeltowicz and Sojak reach for other concepts to explain other aspects of the synergy between aristocrats and craftsmen, such as the creation of the material artifacts used for the generation of scientific facts. In a similar vein, in her study of Serbian archaeological communities, Monika Milosavljević 'retools' Fleck's theory with Bruno Latour's actor-network theory and co-citation analysis to enable more detailed analysis of the communities as networks (2020, 15).

In a similar vein, this thesis also draws on other theoretical tools to broaden the theoretical space for the application of Fleck's concepts and to and clarify certain key elements. Firstly, broadening the scope of application can be justified because Fleck's writings remain firmly within the field of epistemology. In other words, while signalling that his project of

"comparative epistemology" should employ "psychological, sociological and historical methods" (Fleck 1936, 97-98), and while indicating external factors that shape the cognition of a thought style, such as intellectual unrest [*niepokój intelektualny*] (Fleck 2006, 229), his writings tend to focus on the an intertextual, internal analysis of cognition, on how perception and cognition are shaped by external factors, rather than on an external analysis that considers the broad context in which this shaping occurs. Thus he concepts of social practices, cultural production and discourse are tools which allow thought collectives and their styles to be contextualized and analyzed in terms of external determinants.

This thesis draws on the concept of social practice as a set of purposeful activities that are determined by normative beliefs and evaluative hierarchies, and driven by social demand (Kmita 1991, 78-82). Hence, this definition encompasses both the activity of reciting Homer's *Iliad* to provide young Greek men with models for a wide range of social activities, such as making sacrifices, public speaking, and negotiation; and the activity demonstrated in Plato's *Sophist*, namely characterizing and distinguishing between various social roles, such as those of the sophist, philosopher and statesman. So, just as Homeric models of conduct served obvious social purposes, it can also be assumed that the social practice of making distinctions, perhaps the defining characteristic of the Socratic-Platonic thought style, served purposes that were determined by social demand (e.g. the need to clarify emerging divisions of labour, the need for status to be assigned and evaluations to be articulated with regard to new social roles and activity).

Then, drawing on Pierre Bourdieu's analytical model (1993), in this thesis cultural production is understood in the broad sense. Texts—whether 'religious', 'poetic', 'philosophical', or 'scientific'—are treated as cultural products that were produced, circulated and consumed in specific social contexts, and were determined by a set of social conditions and social relations (Johnson 1993, 9-11). Bourdieu's detailed analysis in *The Field of Cultural Production* is focused on literary and artistic forms of cultural production and the unique forms of capital distributed in the cultural field in the 19th and 20th centuries, but his concept of fields (economic, political, cultural, scientific, philosophical etc.) allows a broader contextualization of textual articulation: producers of texts occupy specific positions in specific social formations or fields which determine the production, circulation and consumption of such texts. The key works considered in this thesis, such as Plato's *Republic*, Cicero's *Tusculan Disputations*, Vesalius's *Fabrica*, Hobbes' *Leviathan*, Kant's *The Conflict of the Faculties* and Hegel's *Lectures on the History of Philosophy*, can be positioned as instances of cultural production in an attempt to shed light on their contextual determinants.

The scholarly accounts of the cultural changes that occurred in Ancient Greece, and Europe during the late Enlightenment, posit and construct the existence of group formations that exerted agency in transformative processes—in Ancient Greece: 'the Milesians', 'the Eleatics', 'the Sophists', 'the Athenian school' etc.—in the German states from 1760-1815: '*Aufklärer*', secret societies (e.g., the *Mittwochsgesellschaft* in Berlin), 'the public (*das Publikum*)', 'the philosophy faculty' etc. While the contributions of key individuals tend to be treated as the focal points of these transformations (e.g., Thales, Anaximander, Protagoras, Socrates, Plato; or Lessing, Mendelssohn, Kant), these individuals occupied positions in communities, interacted with audiences and authorities, and engaged in social practices and specific forms of cultural production.

The images conveyed through Plato's texts of Socrates debating in various private and public locations in Athens are images of groups participating in a social practice that came to be deemed a threat to traditional norms, particularly those pertaining to education. These images have reached us through numerous forms of cultural production: the 'original' spoken genre of Socratic dialogue, which was characterized by distinct rituals and communicative purposes; Plato's written reconstructions of this genre, which were embedded in a contemporary field of intertextuality; layers of Ancient Greek doxographic text management and evaluation; the meanings and values assigned through the lenses of modern philosophy, from the Renaissance onward; and layers of modern scholarship, involving translations, commentaries, institutionalized interpretations, etc.

The communication between '*Aufklärer*' and '*das Publikum*' was inseparable from new social practices and forms of cultural production, such as: ritualized discussion at secret societies, which replaced the ceremonies of orthodox religion, broke down social hierarchies, and provided a forum for expressing political opinions outside of the control of the state bureaucracy (Schmidt 1996, 3); the proliferation of journals, such as the *Berlinische Monatsschrift*, which, apart from the (mental and physical) labour of printers, publishers, editors and authors, also entailed investments of time and energy on the part of the reading public (the long-neglected role of readers in bringing about the Enlightenment has been addressed by (Jacob 1991) Houston 2002) and (Melton 2004)); and, lastly, the role of university networks in disseminating the competing visions of the *Aufklärung*—despite their differential antagonism, the 'utilitarian' cameralist philosophy and the *Bildung* ideal were both united in their conception of educational institutions as social machinery for forming a certain type of 'enlightened' individual that would engage in certain social and cultural practices. The conflict between the *Brotstudenten* (middle-class or bourgeois students who treated university

instrumentally, as a means for entering the bureaucracy or military) and scholarly students who identified with the ideal of *Wissenschaft* (research-oriented study, scholarship) (McClelland 1980, 200-203) really concerned *what kind* of student the universities should produce: efficient public servants that would function as well-oiled cogs in the state bureaucracy, or autonomous, self-realized individuals "capable of forming a 'public' equipped for mature self-government" (Herdt 2019, 10-35).

Fleck's theory is sufficient to reconstruct a rough map of the interaction between such thought collectives, and for identifying the key characteristics of emergent thought styles, but the concepts of social practice and cultural production are required to flesh out the details of their communicative interaction. For example, the *Berliner Mittwochsgesellschaft*, a semi-secret debating society that was active from 1783-98, indicates the presence of a specific thought collective with many identifiable members (e.g., Johann Erich Biester, Friedrich Nicolai, Johann Joachim Spalding, Moses Mendelssohn) and two diverging thought styles. The majority of the society's members were officials employed in the state bureaucracy, who espoused an elitist-paternalistic attitude to 'the masses' and 'enlightenment'. Yet there were also independent thinkers—most notably Moses Mendelssohn and Friedrich Nicolai—who took a more optimistic stance on the public's capacity for self-determination. These fundamental differences in attitude led to splits in the society over pressing social issues of the day, such as censorship of the press (Hellmuth 1998). The fact that the society also disseminated its debates in Prussian society via its mouthpiece publication, the *Berlinische Monatsschrift* magazine (1783-1796), which published Kant's *Beantwortung der Frage: Was ist Aufklärung?* in 1784, fits perfectly with Fleck's conception of a thought style being communicated from the esoteric circle of experts to the exoteric circle of laymen (1935a [1979], 105, 115).

However, when the concepts of social (and articulatory) practices and cultural production are applied to the phenomena, other aspects and determinants of the thought collective and thought styles come into view. The practices associated with weekly debating, in a ritualized yet informal group, and with writing, publishing, and reading texts on a wide range of topics (administration, legislation, philosophy, literature), were, by the 1780s, coming to replace traditional, church-centred practices and communication, thus meeting the new social needs that had developed in a secularizing society. Then, in turn, the *Berlinische Monatsschrift* magazine was a new form of cultural production in Prussian society, and though it was primarily produced, circulated, and consumed by the Berlin intelligentsia and the university professoriate, it can be recognized as being part and parcel of a broader explosion of literacy and publishing,

which was subsequently characterized as 'a structural transformation' that took place in European society between 1650 and 1850. In Chapter 6, the conflicting framings and evaluations this process, epitomized in Koselleck's depiction of "critique" (1957 [1988]) and Habermas's account of "the public sphere" (1962 [1992]), are considered in terms of the social practices and forms of cultural production of specific thought collectives.

Lastly, this thesis argues (in Chapter 3) that Fleck's theory requires some clarification (or even correction) with regard to how general thought collectives are conceptualized. Laclau and Mouffe's concept of articulatory practices (1985) is used as a basis for introducing this clarification. I argue that Fleck's writings fail to distinguish between, on the one hand, thought collectives that are deliberately constructed as research objects and, on the other, conceptions of general social groups that circulate as naturalized ideas of common sense. Fleck's definitions and examples of thought collectives range from two or more individuals who form a temporary community to communicate and share ideas, to scientific research communities formed to focus on a specific problem (e.g. the Wassermann congresses and syphilis), to broader groups such as "a political party, a social class, a nation, or even a race" (1935a [1979], 45). In other words, on the one hand, as a researcher of cognition Fleck identifies and constructs specific groups composed of identifiable members (e.g. Wassermann, Citron) (Fleck 1935a [1979], 52-81), and on the other hand, he seems to refer to general groups (social class, nation, race) as ontological entities that determine how individuals perceive and think. Yet, to be consistent, Fleck's theory has to assume that *all thought collectives are constructs produced by thought collectives in the process of cognition*. At some point, members of thought collectives must have coined the concepts 'social class', 'nation' and 'race' to designate abstract groups that were taken to exist in society. Since Fleck's theory stipulates that all concepts and categories are products of interaction between the cognizer, the cognized, and the existing fund of knowledge, no groups are accessible 'in-themselves', ontologically independent of their cognition as such. The existing fund of knowledge is now populated with categories of general groups which, while ultimately grounded in the direct cognition of social patterns and regularities, now function as the stabilized stereotypes of common sense.

Hence this thesis assumes that all thought collectives are discursive constructs, and general thought collectives are at best discursively constructed categories employed in accounts of the socio-cultural field for explanatory and persuasive purposes. For example, the category *bourgeois* (or *Bürger*) originally defined groups who had specific rights within European cities (e.g. in contrast to 'peasants') but was then used to identify a more general collective entity responsible for economic and social change in a variety of contexts across Europe—e.g. 'the

bourgeoisie' of *The Communist Manifesto*. Such categories have been dynamically applied on multiple levels: to changes occurring in the socio-cultural field, and to other textual accounts of these changes. Thus, categories of social class are inevitably entangled in conflicts over how these changes *are* understood and how they *are to be* understood.

This thesis draws on Ernesto Laclau and Chantal Mouffe's conception of discourse as an articulatory practice that creates a meaning-system through "a differential and structured system of positions" (1985, 105). The articulatory practices of discourses produce regimes of signification, texts, concepts, institutions, forms of behaviour etc. whose meaning is constructed differentially and relationally, through the adoption and articulation of positions that are defined in opposition to other discourses and their representatives. In Laclau and Mouffe's Schmitt-inspired conception, discourses are necessarily grounded in antagonism. Collective identifies are discursive constructs formed relationally through the creation of a 'we' defined in opposition to a 'they'; and since antagonism is assumed to be an 'ineradicable' dimension of social life, collective identities tend to be formed through differentially demarcating enemies (Mouffe 2005, 1-15). Nations, classes, social groups, political parties and movements, etc. are thus conceived of as collective identities that are dynamically and continually constructed in the social field, where meaning is constantly contested and discourses "attempt to dominate the field of discursivity, to arrest the flow of differences" (Laclau Mouffe 1985, 112). Thus, if the central role of conflict and antagonism in social life is accepted, when discourse participants articulate positions from within a discourse, they inevitably participate in a 'discursive struggle' (Jorgensen Phillips 2002, 6) (Dersley 2020).

Fleck touches upon the issue of conflict when he describes Vesalius's innovations in anatomy as a 'struggle' or 'battle' (*Kampf*) in the face of tradition (1929 [1979], 54), and when, in a later text, he describes the reception of Vesalius's new approach as facilitated by the "collective mood" of the period: one of "intellectual unrest" and a "dissimilarity of views" (1935b [1979], 75). In *The Genesis of a Scientific Fact*, Fleck suggests that Wassermann's syphilis experiments were driven by a "rivalry between nations", and by social need and interest, and the "insistent clamor of public opinion" (1935a [1979], 68-77). Thus, rivalry between French and German governments, and the prevailing moralistic social attitude towards syphilis, led to the creation of a thought collective which came to develop the 'Wasserman reaction' and the genesis of new scientific facts.

However, while Fleck's theory accounts for how conflict and rivalry can determine a change in thought style or even the formation of a new thought collective, his theory lacks a developed conception of how thought collectives define themselves and their thought styles

relationally, through their perceptions, conceptions and definitions of other thought collectives and styles. Fleck asserts that individuals are rarely aware of the prevailing thought style that compels their perception and thinking (1935a [1979], 41), thus, on these terms, if the self-definition of a thought style and the identification of other thought collectives and styles does occur, it must largely take place on an unconscious level. Yet the concepts of general thought collectives that Fleck mentions (class, race, nation) *do* evidently circulate in communication, and individuals *do* identify themselves as belonging to such general collectives. While the extent of the compulsion dictated by a thought style may be hidden from consciousness, consciousness of group formations seems to be a fundamental aspect of human social life.

Afeltowicz and Sojak observe that the concept of *style* is employed to organize, characterize and demarcate phenomena; it gives us a sense of ontological security, "the belief that we have control over the world around us and that we are able to grasp it in conceptual terms" (2015, 30). Thus, the concept of style—no matter at which point on the continuum from unconscious conviction to conscious differentiation it is employed—has concrete social and psychological functions. The very concept of style entails distinctiveness: it only makes sense to talk about a style if its characteristics distinguish it from other styles. Thus, from the perspective of research activity, to identify a thought style requires: a) distinguishing it from other styles; b) considering how the style distinguished itself (consciously or unconsciously) from others; and c) bearing in mind that we as researchers are determined by thought styles when making such distinctions.

Fleck signalled that the study of thought styles is necessarily differential with his concept of 'comparative epistemology', a science that has to take "into account the variety of thought-styles and multiplicity of thought-collectives" (1936, 98). However, his comparisons tended to focus on the distance between modern and pre-modern thought styles, and on the alienness of the latter (e.g. the examples of Paracelsus (1935a [1979], 126), Berengar (1935b [1979], 74-75)), rather than how contemporaneous thought styles interacted and differentially and mutually constructed each other.

Hence, another key hypothesis of this study is that the concept of discursive struggle as a differential articulatory social practice is a crucial tool for explaining the entangled interaction between thought collectives, and for characterizing and distinguishing between thought styles. Thus, for example, on the one hand general thought collectives (such as class, race, nation) can be viewed as categories constructed through differential discursive conflict, and, on the other hand, discursive conflict is—necessarily—the result of antagonism between particular thought collectives. Thus conceived, the concepts of thought style and discourse denote the same

phenomena but provide different conceptual lenses for viewing them through: the concept of a thought style brings group formations into focus, shedding light on the collective determinants of cognition and the alteration and repurposing of concepts as they are communicated; whereas the concept of discourse focuses on the differential meanings, positions and identifications that these group formations construct, contest and assert in the pursuit of hegemony. A thought style is a discourse viewed from the perspective of collective human cognition; a discourse is a thought style viewed from the non-human perspective of meaning systems, articulatory practices, and institutional determinations.

Sometimes the thought collectives involved in cultural transformation are the discursive constructs of other collectives (e.g., 'the poets' and 'sophists' constructed by Plato's philosophy; the '*Brotgelehrten*' (careerist scholars) attacked by Schiller at the University of Jena in 1789 (Schiller 2017); 'the Presocratics' constructed by modern scholarly philosophy; the various social classes and groups constructed by historical scholarship, e.g. "the academic proletariat" (Epstein 1966, 63)). Sometimes they are groups constructed through self-identification (e.g., the *Aufklärer*, the *philosophes*, the men of *Bildung*). Thus, it can be argued that the identification and construction of groups (thought collectives) is itself a key element of cultural change: groups distinguish themselves differentially from other groups, through the evaluation and critique of existing social practices and forms of cultural production. The assertion and introduction of new modes of cultural production occurs through differential identification, evaluation, and struggle, and employs an array of textual strategies and institutional resources.

1.4 Research Hypotheses, Methodology and Outline

1.4.1 Research Hypotheses

To recap and clarify, the primary hypotheses of this study are as follows:

1) that Fleck's theory of *thought collectives* and *thought styles* has the potential to shed light on aspects of revolutionary cultural change that elude other theoretical frameworks (e.g., those of Marx, Kuhn, Foucault),

2) that Fleck's conceptual framework and tools can both avoid and reflexively analyse entrenched binary frameworks and categories that are often used in accounts of cultural change.

These hypotheses will be tested by applying Fleck's supplemented theory to two examples of broad cultural transformation:

1) the emergence of philosophy as a distinct cultural practice in ancient Athens and its appropriation in the Late Republic of Rome (considering the myth to logos paradigm, the articulation of philosophy as a hegemonic, supervisory cultural practice, and the Socratic caesura);

2) the liberation of European philosophy from theological control during the 17th and 18th centuries (considering the *Bildung* ideal, the rise of the philosophy faculty in the German university; the emergence of the public sphere and the multi-dimensional conflicts of the European Enlightenment)

As was mentioned, the two transformations are related, especially in Hegel's philosophy, where the concept of *Bildung* is treated as a later stage of the Greek *paideia*, and the identity and role of German philosophy and culture is constructed through differentiation from that of Ancient Greece. Furthermore, some of the key thought styles under investigation, which describe themselves with the term 'philosophy', can be identified as displaying a recurring and defining feature: they habitually claimed the right to control and supervise the field of cultural production.

1.4.2 Methodology

The methodology employed in the thesis is clarified and justified in more detail in Chapter 3, which extracts the key concepts for investigating cultural change from Fleck's writings. An evaluation of Fleck's own attempts at applying his concepts to cultural change (e.g., Vesalius's innovations in the discipline of anatomy) highlights that a contemporary application of Fleck's conceptual tools for the investigation of cultural change has to go beyond the analysis of source texts and consider the broader social and cultural circumstances of their production. Hence, employing the concepts of articulatory practices and discursive struggle (Laclau and Mouffe) and the field of cultural production (Bourdieu), the method used in this thesis analyses both source texts (predominantly in translation, but also with reference to the originals for key concepts) and scholarship from the various branches of historical studies (e.g. ancient, cultural, economic, institutional, medical etc.). In some sections, scholarly reconstructions are synthesized and summarized with a view to enabling the characterization of thought collectives and thought styles. At appropriate moments in Chapters 4, 5 and 6, reflexive consideration is given to the explanatory power of Fleck's concepts in comparison with other frameworks, such as Kuhnian paradigms, and to the additional light Fleck's theory sheds on the scholarship.

1.4.3 Outline

The remaining parts of the thesis are structured as follows.

Chapter 2 follows Fleck's references to contextualize his theory and identify the unique contribution of his proposed 'comparative epistemology'. This involves a close analysis of Lucien Lévy-Bruhl's sociological approach to anthropology, and then of Ernst Mach's conventionalist account of science, with a view to clarifying Fleck's position. It is argued that Fleck's account of scientific facts emerges from his intuitive—rather than scholarly—critique of the conception of facts presented in Mach's historical-evolutionary depictions of science. It is suggested that Jerzy Giedymin's perceptive critique of Fleck's position vis-à-vis Machist conventionalism nevertheless underestimates Fleck's diagnosis of a weak spot in Mach's historical writings. Next, Fleck's conception of the 'passive elements' of cognition is also contextualized, and it is suggested that, rather than merely being an attempt to bring "'objective reality' in through the back door" (Sady 2000, 61), these passive elements, as non-arbitrary, relational determinants of cognition, prevent Fleck's position from slipping into full-blown relativism. It is suggested that the implications of Fleck's conception of historical facts and of the passive elements of cognition are crucial for any attempt to apply this proposed 'comparative epistemology'.

Chapter 3 analyses Fleck's writings from 1929 to 1936, with a view to extracting his key concepts and putting together a theoretical toolkit for investigating cultural change. A close analysis of Fleck's various definitions and descriptions of thought collectives leads to the conclusion that when applied to general thought collectives (class, race, nation etc.), his theory requires updating with a conception of thought collectives as discursive constructs. It is then shown that Fleck's account of change develops from an overly simplistic emphasis on the role of individual genius to a more robust theoretical framework which indicates the role of intellectual unrest, collective mood, and the circulation of ideas between thought collectives. Next, consideration is given to how Fleck's proposed 'comparative epistemology' can be applied to both source texts and the layers of scholarship that has accreted around them. However, at this point justifications are presented for supplementing Fleck's theoretical framework with other conceptual tools, such as that of the functional model of ideology (Rosen), discursive and articulatory practices (Foucault, Laclau and Mouffe) and the field of cultural production (Bourdieu). The chapter concludes with a summary of the methodological guidelines.

Chapter 4 applies the theoretical framework developed in Chapter 3 to the cultural change identified as having occurred in Ancient Greece. The enduring 'from myth to logos paradigm' is considered, as well other more critical rejections of this binary framework. The chapter then turns to an analysis of the famous 'quarrel between philosophy and poetry' in Plato's *Republic*. Consideration is given to scholarly analyses that treat Plato's attack on poetry in Book X of the Republic as a gratuitous appendix as well as to readings that situate Plato's theory of mimesis within a broader conceptual framework geared towards establishing the supremacy of philosophy over other genres and forms of knowledge. In order to view Plato's thought style in terms of its communicative purposes, the analysis turns to the discursive strategies that are employed consistently across Plato's texts: the *Ion*, *Phaedrus* and *Charmides*. Particular attention is paid to Plato's *Charmides* and Thomas M. Tuozzo's reading of the text as representing philosophy as a cultural practice. The concept of *sophrosyne* (moderation, temperance, sound-mindedness) analysed by Socrates and Critias is treated as an example of a Fleckian proto-idea, and their attempts to establish a basis for supervising all knowledges is interpreted as symptomatic of a thought collective preoccupied with changing social relations and modes of production. Plato's representation of Critias—the poet and social theorist who seized control of Athens in 404-3 with the Thirty Tyrants—is contextualised and considered in terms of thought styles, discursive representations, and cultural practices. Fleck's concepts allow the identification of an Athenian oligarchic thought collective that articulated opposition to the democracy between 432 and 403, and which transitioned from purely articulatory practices to intimidation, violence and the introduction of a narrow oligarchy. It is suggested that Plato's thought style emerged from this oligarchic thought collective, and that the *Republic* can be read as a response to collective trauma and as a switch of focus to the assertion of cultural hegemony. The last sections of the chapter consider Plato's articulation of "the Socratic caesura" (Laks 2018) in the context of rival thought styles, and Cicero's reformulation of the Socratic caesura in the context of the Late Roman Republic. It is argued that Fleck's theory can be used to counter the homogenizing, suppressive and exclusionary strategies that were successfully implemented by Plato's practice of philosophy and its transmission across the centuries.

Chapter 5 argues that Hegel's conception and positioning of philosophy as a discipline, which reactivated Platonic distinctions and categories, was determined by the centuries-long conflict between institutionalised thought collectives within the German university system. The chapter focuses on Hegel's *Lectures on the History of Philosophy* and suggests that the strategies Hegel adopts throughout the lectures—such as identifying Greek philosophy as a

unique spiritual rebirth, treating the German concept of *Bildung* as a later stage in the development of the Greek *paideia*, rejecting Creuzer's interdisciplinary approach and insisting that philosophy is distinct from mythology, religion and poetry—were determined by institutional-discursive conflict whereby the philosophy faculty of the German University rose from a position of subservience to one of dominance and mastery—a position epitomised by the status assigned to philosophy at the University of Jena and then the Berlin-Humboldtian University. The concept of *Bildung* is thus framed as a conceptual-discursive weapon that was repurposed by specific thought collectives as new thought styles emerged in the discursive-cultural conflicts of the late-18th and early-19th centuries.

Chapter 6 supports the argument presented in Chapter 5 by circling back to trace the history of the philosophy faculty in the institution of the German University, from the late mediaeval period, through the Reformation, the *Aufklärung*, to Kant's *The Conflict of the Faculties* (1798). The analysis focuses on the conflict between Kant and Woellner that resulted in the royal reprimand of 1794 in order to consider different historical perceptions and framings of the European Enlightenment. The conceptions of criticism and the public sphere presented by Koselleck and Habermas in the 1960s are examined as examples of a tendency to impose binary frameworks on historical periods. As an alternative, following Koselleck's identification of Hobbes's thought as a critical moment initiating the Enlightenment, Hobbes' philosophy is contextualised and considered in the light of multiple antagonistic thought collectives. The problem of censorship is highlighted as a key issue in the texts of Hobbes and Spinoza before returning to Kant's response to censorship in *The Conflict of the Faculties*. The final analysis draws on previous sections to argue that Kant's conception of the philosophy faculty as a controller of the other university faculties and as supervisor of communication between the government and the public is a claim made on behalf of a specific thought collective as it rose in status in German society.

The **Concluding Remarks** comment briefly on the applications of Fleck's theory and concepts in Chapters 4, 5 and 6.

Chapter 2: Fleck's Theory in Context – Unique Contributions

2.1 Positioning Fleck's Thought – the Internal Perspective

In contrast to the tradition of individualist epistemology, perhaps most clearly represented in the writings of Plato and Descartes, in which rational thought is depicted as escaping social and natural determination, in a movement of ascent or withdrawal towards pure and neutral deductions, for Fleck *all* cognition is socially determined—with the reasoning and hypothesizing of philosophers and scientists being no exception. What and how individuals perceive and think is conditioned by the sociocultural collectives to which they belong. The collective trains the individual to see the world in a certain way, through language, education, apprenticeship, indoctrination etc., and without such training there would be no communicable thought. Thus, as a member of society the individual necessarily belongs to *thought collectives* and employs the *thought-styles* specific to them.

The issue of Fleck's own thought-style will be tackled in more detail in Chapter 3, where his theory of thought-styles and comparative epistemology are examined in more detail. At this point, the intention is to provide a preliminary and approximate location for Fleck's thought, on the basis of Fleck's own explicit signals and references.

If Fleck's thought is examined from an external perspective and is subjected it to the analysis of comparative epistemology, his contention that all thought is socially conditioned can be traced back to Francis Bacon's 'Idols of the Mind', presented in *Novum Organum* (1620). Bacon's famous metaphor depicts human knowledge as being woefully determined and encumbered by both nature (the biases driven by innate inclinations—the Idols of the Tribe) and culture, due to the workings of education (the Idols of the Cave), imprecise language (the Idols of the Marketplace) and inherited dogma (the Idols of the Theatre). It is possible to argue that Fleck's thought contains conceptual elements and positions inherited from the classical empiricism of Locke and Hume, in particular their emphasis on the role of experience as the primary determinant of human thought. However, Fleck's writings make no reference to Bacon, Locke or Hume, and thus the identification of such elements in Fleck's thought would have to be performed through explicitly external attribution.

Such an attribution can be fully justified on the basis of the method of comparative epistemology that can be reconstructed from Fleck's texts; but before such a reconstruction could be performed, an internal analysis of Fleck's theory is necessary—one which follows the

explicit references and implicit signposting that Fleck used to situate his thought in relation to various then-recent and contemporary currents.

Wojciech Sady traces Fleck's theory of thought-styles back to Immanuel Kant's forms of intuition and categories of the understanding: "the cognitive *a priori*" which transcendentally determines the subject's experience and knowledge. According to Sady, Fleck's thought is Kantian to the extent that it posits the cognitive *a priori* as actively determining experience, but non-Kantian in the sense that the cognitive *a priori* is in turn posited as being determined by social groups . Hence, while for Kant the cognitive *a priori* constitutes the innate, immutable, universal cognitive equipment that all human subjects bring to bear on experience, for Fleck the cognitive *a priori* is inherited or acquired from a particular, socially-determined collective, and is therefore subject to change.

Sady's positioning has internal validity, for two reasons: firstly, because Fleck references Kant's thought at several points (though it has to be said that these references do not provide any evidence of a deep engagement with Kant's writing); and secondly, because Fleck explicitly draws on and engages with some currents of post-Kantian thought, namely French sociology and French and German conventionalism.

In *Genesis and Development of a Scientific Fact,* Fleck refers to Kant on two occasions. In Chapter Two, Section Three, Fleck uses the examples of Columbus and Kant to demonstrate the "tenacity of viewpoints". When a conception permeates a thought collective to such a degree that its contradiction becomes unimaginable, it becomes a viewpoint (*Anschauung*). It was a viewpoint that led people to argue against Columbus: the absolute meaning attached to the concepts 'up' and 'down' made it impossible for them to conceive of the world as round. In turn, Kant's "unknowable substratum of 'things in themselves'" is treated as symptomatic of a viewpoint that uses the concepts of "reality, truth and existence" in an absolute sense. Fleck suggests that the problems caused by these viewpoints disappear when a relativistic frame is adopted (Fleck 1935a [1979], 27-28).

Here Kant is deployed to represent an epistemology that is underpinned by the assumptions of an absolutist metaphysics or ontology: although Kant's thought circumscribes and denies epistemological access to the real, in the form of the 'thing-in-itself', this epistemology is still identified as being based on the metaphysical assumption that there is an *absolute*, Newtonian reality independent of human cognition; an assumption which Fleck— due to his unique and specific relativist stance—views as having been thoroughly undermined.

The second reference to Kant appears in Chapter Two, Section Four, when Fleck draws on French sociology to emphasize the role of the collective in determining the thought of

individuals, and quotes Wilhelm Jerusalem at length. Jerusalem translated and edited Lucien Lévy-Bruhl's *Les fonctions mentales dans les sociétés inférieures* (1910) as *Das Denken der Naturvölker* (1921), which was a work of key importance for Fleck. However, apart from his endeavors in disseminating William James' pragmatism, Èmile Durkheim's sociology and Lévy-Bruhl's sociological-ethnology to the German public, Jerusalem also made his own pioneering contributions to the sociology of knowledge (Huebner 2013), with *Die Soziologie des Erkennens* [The Sociology of Cognition] (1909), a work which received "a sympathetic analysis" from Durkheim (Uebel 2012, 6), and *Die soziologische Bedingtheit des Denkens und der Denkformen* [Sociological Conditioning of Thinking and Thought Patterns[3]] (1924). Fleck quotes a passage from the latter essay:

> Kant's firm belief in a timeless, completely immutable logical structure of our reason, a belief that has since become the common heritage of all who adopt an a priori point of view and is maintained with great tenacity also by the latest representatives of this direction of thinking, has not only failed to be confirmed by the results of modern ethnology but proved to be definitely erroneous. (Fleck 1935a [1979], 47)

Hence, according to Jerusalem, following and in association with Durkheim and Lévy-Bruhl, the mutability of the categories that determine human cognition is demonstrated by the empirical evidence supplied by ethnology and philology.

These two brief references to Kant support Sady's positioning of Fleck's thought. In addition to being identified as a representative of an absolutist ontology, Kant is also targeted— via Jerusalem—as a proponent of an immutable and universalist epistemology.

Hartmut von Sass also traces Fleck's thought back to Kant, suggesting that Fleck's transcendentalism is more "humble" than that of Kant: while Kant claims to have uncovered the "culturally and historically invariant" epistemic apparatus with which 'we' are all equipped, Fleck rejects this universalism in favour of a "situated" transcendentalism; the transcendental determinants of cognition are "embedded in concrete cultural environments, contexts, practices, or conceptual schemes" (Sass 2016, 74).

Of course, Fleck was not the first to arrive at such a 'situated' transcendentalism. In *Les formes élémentaires de la vie religieuse* (1912), Emile Durkheim had posited that space and time are socially determined collective representations, and that the categories of thought have

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[3] The title given in F. Bradley and T.J. Trenn's translation of *Genesis and Development of a Scientific Fact*. (1979). Daniel R. Huebner translates this essay title as "The Sociological Determination of Thought and of the Forms of Thought" (Huebner 2013, 447).

a social origin and are thus subject to change: "[…] the categories of human thought are never fixed in a definite form. They are made, unmade and remade incessantly; they vary according to time and place" (Durkheim 1912 [2001], 16).

Thomas Schnelle suggests that Fleck only had a superficial knowledge of the European sociological school, and that drawing on the ideas of Durkheim and Lévy-Bruhl helped him develop a position that could answer the questions collectively posed—but individually answered—by the philosophers of 'the Lwów school': Twardowski, Ajdukiewicz and Chwistek; questions concerning "the 'what' and the 'how' of the factors determining reality" (Schnelle 1986).

However, regardless of the depth of Fleck's knowledge of French sociology, in *Genesis and Development of a Scientific Fact* Fleck explicitly refers to Durkheim and his notion that collective and social structures are imposed on the individual (Fleck 1935a [1979], 46).[4] Fleck's situated transcendentalism posits that cognition involves the knowing subject (the cognizer), the object to be known (the cognized) and "the existing fund of knowledge" (*Wissensbestand*) (Fleck 1935a [1979], 38). This existing fund of knowledge is a socially and historically determined component added to the Kantian cognitive *a priori* and can be identified—at least to some extent—with Durkheim's social structures.

As will be highlighted Chapter 3, in Fleck's theory the communication of concepts between different thought styles necessarily involves an element of transformation, hence when Fleck, a Polish epidemiologist, appropriated concepts from the French sociological school, in order to stake out an epistemological philosophy of science in opposition to the philosophers of the Lwów school (Schnelle 1986) and the Vienna Circle (Fleck 1935a [1979], 50), innovation was inevitable. However, Fleck's adoption of Durkheim's social structures as determinants of thought, in the form of the 'existing fund of knowledge' is not particularly transformative, since it is fully consistent with the sociological critique of Kantian epistemology. It is elsewhere that Fleck's major innovation occurs.

2.2 Fleck's Critique of the French Sociological School

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[4] When Fleck writes "Durkheim speaks expressly of the force exerted on the individual by social structures both as objective specific facts and as controlled behavior" (Fleck 1935a [1979], 46), he appears to be referring, via Jerusalem's introduction to Lévy Bruhl's *Primitive Mentality* (1922), see footnote 23 (Fleck 1935a [1979], 46), to the passage in *The Elementary Forms of Religious Life* where Durkheim describes the categories as "the common ground where all minds meet": "When we try to rebel against it, to free ourselves of some of these essential notions, we run into sharp resistance. So not only are these categories independent of us, they impose themselves on us" (Durkheim 1912 [2001], 15)

According to Fleck, while the representatives of sociology (Durkheim, Lévy-Bruhl, Gumplowicz and Jerusalem) correctly identify collective ideas as determinants of cognition, they also have "pious reverence for scientific facts" (Fleck 1935a [1979], 46-47).

Fleck bases this move on a reading of Lévy-Bruhl's *Les fonctions mentales dans les sociétés inférieures* (1910, translated as *How Natives Think,* 1926), or at least sections thereof.[5] After identifying Lévy-Bruhl as a student of Durkheim, Fleck cites passages from Lévy-Bruhl's introduction which question the notion that the human mind is a permanent, unchanging entity.

In the introduction to *How Natives Think*, Lévy-Bruhl suggests that the contributions of Durkheim and his collaborators will lead to "a theory of knowledge […] founded upon the comparative method" (Lévy-Bruhl 1910 [1926], 4). Lévy-Bruhl traces the postulate of the comparative method back to Auguste Comte, who is identified as recommending that the "higher mental functions" should be studied from the social perspective, rather than the individual perspective, employing the sociological method in a positive science (Lévy-Bruhl 1910 [1926], 5).

However, according to Lévy-Bruhl, E. B. Tylor and "the English school of anthropology" took the comparative method further than Comte's postulate, in order to "study mental phenomena in different types of human societies" (Lévy-Bruhl 1910 [1926], 6). Yet these anthropologists made a fundamental mistake: on encountering consistent similarities in the societies they studied ("the same institutions; the same religious or magical ceremonies; the same beliefs and customs relating to birth and death […]" (Lévy-Bruhl 1910 [1926], 7)), they assumed that these similarities could only be explained "in one way only", namely by positing that the human mind is universal. Lévy-Bruhl argues that this belief operates as an unquestioned axiom, and that this axiom underpins the English school's hypothesis of animism.

In Lévy-Bruhl's reading of Frazer's *Golden Bough*, the hypothesis of animism is posited to explain the apparent uniformity of beliefs and practices in disparate societies. Thus 'the primitive' is posited as treating the representations of dreams as real, which leads to a belief in a double existence populated with bodies and immaterial souls and phantoms, entailing that natural phenomena are attributed with causal agency. This 'primitive' philosophy is put forward as the *probable* explanation for customs such as destroying a dead man's weapons and placing coins or grain in the mouths of dead people. For Lévy-Bruhl, the hypothesis of animism and the notion of a uniform 'primitive' philosophy are inevitable consequences of assuming the human mind is universal. In Lévy-Bruhl's diagnosis, the hypothesis of animism proved to be a

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[5] Fleck refers to the German translation, *Das Denken der Naturvölker*. Ed. Wilhelm Jerusalem. 2d ed. Vienna and Liepzig: Braumüller, 1926

hindrance that prevented the English school of anthropology from becoming a "positive science of the higher mental functions" (Lévy-Bruhl 1910 [1926], 9).

Lévy-Bruhl's counter-argument firstly focuses on the probable nature of the reasoning employed by Frazer (and by extension the English school of anthropology). The hypothesis of animism is only one possible explanation of the apparent uniformity in the accumulated data, which is clear from Frazer's language ("*may* have sprung […] *probably* later"). For Lévy-Bruhl, such probable reasoning is extremely "risky" (Lévy-Bruhl 1910 [1926], 11-13).

Secondly, Lévy-Bruhl homes in on the fact that the phenomena analyzed by the English school are fundamentally social in nature ("institutions, beliefs, practices"), and therefore concern "collective representations". This is the critical point: the hypothesis of animism and the axiom of the universal nature of the human mind are based on a conception of the human mind that treat the mind as an individual entity that is *a priori* equipped with a 'primitive' philosophy, prior to any social experience. Following the insights drawn from Durkheim's sociology, Lévy-Bruhl asserts that collective representations are subject to social laws, that all minds are "socialized", and asserts (as cited in (Fleck 1935a [1979], 46)): "The idea of an individual human mind absolutely free from all experience is, then, as fanciful as that of man prior to social life. It does not correspond with anything that we can grasp and verify, and the hypotheses implying it could but be arbitrary" (Lévy-Bruhl 1910 [1926], 14).

For Lévy-Bruhl, mentality is determined by the type of society, and therefore different types of society will have different mentalities (Lévy-Bruhl 1910 [1926], 18). Thus far, Lévy-Bruhl's sociological account of human thought is largely compatible with Fleck's theory of thought styles, and Fleck seems to have clearly drawn on many elements of Lévy-Bruhl's book, not least the comments on a theory of knowledge based on a comparative method.

Lévy-Bruhl and Fleck part company, however, over the difference between 'primitive' mentality and 'our' mentality. Drawing on the work of Durkheim and Mauss, Lévy-Bruhl defines the 'primitive' mentality as "prelogical and mystical", governed by the law of participation, rather than the law of non-contradiction (Lévy-Bruhl 1910 [1926], 323). According to Lévy-Bruhl, in its most 'primitive' form this mentality does not employ collective representations, since collective representations require that the object be perceived as distinct from the subject, but participation requires "collective mental states of extreme emotional intensity" (Lévy-Bruhl 1910 [1926], 324), which are realized through rituals and totemism. Collective representations only emerge when social relations develop; as relations evolve, individuals become conscious of themselves as members of the group, there is a sense of belonging to the group and antagonism to those outside it. As a consequence, the "mystical

symbiosis" weakens, participation is no longer felt directly, so ancestor worship and myths emerge as collective representations that enable access to the lost symbiosis. For Lévy-Bruhl, these collective representations are not based on (and do not aim at) logical understanding or explanation, but on the realization of emotional communion (Lévy-Bruhl 1910 [1926], 324-330). Thus the 'primitive' mentality is defined as being "differently oriented" to 'our' mentality.

At this point, Lévy-Bruhl highlights an issue which will become of paramount importance for Fleck. Given that 'our' mentality is governed by a different law and has entirely different purposes, how can 'we' possibly understand the 'primitive' mentality? For example, when we translate a Māori myth into our language, for Lévy-Bruhl the "very translation is a betrayal", and we cannot but impose "our customary habits of thought" in our sentence constructions (Lévy-Bruhl 1910 [1926], 330-331). Though Lévy-Bruhl does not explicitly associate the cognitive shift involved in the transition from oral myths to their written reconstruction, he comes close when he argues that for the 'primitive' the words of myths are realities, and the focus is on emotional, mystic communion, while "what we call a myth is but the inanimate corpse which remains after the vital spark has fled" (Lévy-Bruhl 1910 [1926], 332).[6] Lévy-Bruhl concludes that understanding such myths is at best deeply problematic, and at worst impossible, and warns against any explanations which seek reduce myths to "psychological and intellectual activity similar to our own" (Lévy-Bruhl 1910 [1926], 333).

Lévy-Bruhl's account of how the 'primitive' mentality develops into 'our' mentality is as follows: some people in the social group become responsible for mediating participation (e.g. a medicine man), and those families and people not involved in this mediation become "represented in a more impartial and objective way", which leads to a distinction between the sacred and the profane (Lévy-Bruhl 1910 [1926], 335-336). Once mystic perception begins to lose its hold on the mind, nature is seen with "less-prejudiced eyes", concepts develop, experience becomes an authority, and the law of non-contradiction supplants the law of participation. While the law of participation holds sway, nothing is impossible or absurd, but when experience is trusted and concepts begin to classify nature, the previous mystical connections come to be seen as contradictory (Lévy-Bruhl 1910 [1926], 335-340).

The transition from the prelogical mentality to the logical mentality is gradual, with Lévy-Bruhl suggesting that the emerging "abstract and general concepts" contain elements that are "vestiges of an earlier stage" (Lévy-Bruhl 1910 [1926], 340-341). In fact, Lévy-Bruhl allows

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[6] Again, the notion that words have the status of things in some thought collectives is one that Fleck will propose in *The Problem of Epistemology* (Fleck 1936 [1986], 94).

that these vestiges are never permanently eliminated: "our mental activity is both rational and irrational. The prelogical and the mystic are co-existent with the logical" (Lévy-Bruhl 1910 [1926], 347).

Fleck seizes on this notion that logical mentality, as defined by Lévy-Bruhl, is impartial, free from prejudice, and objective:

> Lévy-Bruhl believes that scientific thought yields concepts which "solely express objective features and conditions of beings and phenomena." But he would find it difficult to define the meaning of "objective features" and "perception proper." Moreover, the attraction of attention by objective properties alleged to occur "ipso facto" is psychologically impossible. The perception of scientifically accepted properties (assuming Levy-Bruhl considers these "objective") must first be learned. It does not occur ipso facto and, indeed, the ability to perceive scientifically is only slowly acquired and learned. Its prime manifestation is discovery. This occurs in a complex, socially conditioned way, which resembles the origin of other ideas of the collective. (Fleck 1935a [1979], 48)

This reading of Lévy-Bruhl allows Fleck to draw on many of the tenets of French-Durkheimian sociology, and at the same time depict it as being blind to the implications of its own assumptions. Thus, without analysis of, or even reference to, Durkheim's *Les Règles de la Méthode Sociologique* [The Rules of Sociological Method] (1919), in which Durkheim presents his conception of social facts, Fleck is able, via an eminently plausible reading of Lévy-Bruhl, to present the French sociologists as convinced that their perceptions and way of thinking—finally free from absurd mythical ideas and religious modes of thought—can finally lay claim to the status of objective, impartial and true knowledge (Fleck 1935a [1979], 47-51). French sociology is thereby implicitly charged with being ultimately inconsistent with its own principles: it is a science that identifies the social and historical determination of other thought-styles, while assuming that its own thought is 'purely theoretical' and free from such conditioning.

2.3 Fleck on Conventionalism

Sady suggests that Fleck drew upon some fundamental tenets of conventionalism to counter this blind spot of sociology, and at the same time used sociology to counter the claims of conventionalism:

From the conventionalists he adopted the stance that reality can be described in a variety of ways, which cannot be reduced to each other. However – and here Fleck rejects the thesis of Poincaré or Duhem, through appealing to the sociology of knowledge – we are not free to choose between theoretical systems. Social factors […] not only determine which religious or legal doctrine prevails; they also determine the choice of scientific theory. (Sady 2000, 37)

Just as Schnelle suggests that Fleck has cursory knowledge of French sociology, Jerzy Giedymin questions whether Fleck had "first-hand familiarity" with the writings of Ernst Mach, to whom Fleck refer on a few occasions, treating him as a representative of conventionalism. Giedymin goes as far as to argue that, like many thinkers of his generation, Fleck's understanding of the conventionalist philosophy was "mistaken", and that a key component of his own theory, namely the distinction between the active and passive elements of a thought style, was actually an essential element of the conventionalist philosophy (Giedymin 1986, 185-186).

Since Fleck makes only makes a couple of superficial references to Poincaré in his writings,[7] and does not mention Duhem at all, in this section I will instead focus on how Fleck positions his thought with regard to Mach's analysis of science. Fleck's first reference to conventionalism appears in Chapter One of *Genesis and Development of a Scientific Fact*. He suggests that the different concepts of syphilis which emerged in history (the carnal scourge, the empirical-therapeutic concept based on treatment with mercury, and the various experimental-pathological concepts) were all based on observation (and maybe experiment) and thus none of them "can simply be declared wrong" (Fleck 1935a [1979], 8).

Since syphilis can be described in a variety of ways, it appears that it is "a matter of free choice" which concept is chosen, but once such a choice is made, the associations which then ensue are necessary. So, for example, if the concept of carnal scourge is 'chosen' and applied to syphilis, then this concept would necessarily have to also include other similar afflictions, such as gonorrhea and soft chancre; and the concept of a scourge inflicted by a supernatural deity entails that any ideas concerning rational treatment are precluded. Fleck frames this notion of choice as typifying the position of Mach and his followers—a position which Fleck simply identifies as that of conventionalism:

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[7] See (Fleck 1935b [1979], 59, 61).

In this respect a certain amount of latitude appears to exist. It is only after the choice has been made that the associations produced by it are seen as necessary. As is well known, this is a viewpoint held by the conventionalists. […] From this formal point of view, therefore, there are some associations which are open to choice, that is, free associations [*freie Koppelungen*], and others that are constrained. Those who recognize economy of thought as the intention to choose from among the active free associations are guided by the theory of Mach. (Fleck 1935a [1979], 8-9)

In characterizing Mach's historical-philosophical analysis of science as straightforwardly 'conventionalist', Fleck fails to address or highlight Mach's unique critical engagement with and contribution to conventionalist thought. Fleck's image of Mach is constructed and deployed as a punchbag against which he can set out his own position. Thus, in this depiction, Fleck implies that for Mach's 'conventionalism' the initial choice between various concepts (i.e. carnal scourge or experimental-pathological) is made with complete freedom, from a purely formal standpoint. Necessity or determinism only emerges once the initial choice has been made.

Fleck attacks (this characterization of) conventionalism by invoking cultural-historical determinism, and simultaneously introducing his concept of 'thought-style':

First, the adherents of all these formal points of view pay far too little, if any, attention to the cultural-historical dependence [*die kulturhistorische Bedingtheit*] of such an alleged epistemological choice – the alleged convention [*der angeblichen Konvention*]. Sixteenth-century physicians were by no means at liberty to replace the mystical-ethical concept of syphilis with one based upon natural science and pathogenesis. A stylistic bond exists between many, if not all, concepts of a period, based on their mutual influence. We can therefore speak of a thought style which determines the formulation of every concept. (Fleck 1935a [1979], 9)

Thus, Fleck's characterization of Mach's conventionalism quite clearly constructs Mach's thought as positing that scientific concepts are entirely arbitrary conventions, and that they are freely chosen from a formal point of view, that is, without historical or cultural determinants (Giedymin 1986, 185). The concept of 'thought style' is conceived of in contrast to this image

of conventionalism: rather than being able to choose concepts freely, sixteenth-century physicians were bound by a historically and culturally determined style of thinking.[8]

According to Giedymin, Fleck's error lies in interpreting the conventionalists as claiming that (1) "conventions depend only on the free choice or the whims of the individual scientist and are unaffected by experiential, socio-historical or biological circumstances", when in fact no conventionalists made such a claim (Giedymin 1986, 186). Giedymin then suggests that (2) in fact Fleck suppresses a component of conventionalist (and Machist) thought, which he then incorporates into his own epistemology, namely the distinction between the 'active' (subjective) elements of knowledge and the 'passive' (objective) elements.

The next sections will address these two arguments put forward by Giedymin, focusing on the writings of Mach.

2.3.1 Free Choice in Mach's Conventionalism

The work in which Mach perhaps most clearly addresses the issues of choice and convention is *Principles of the Theory of Heat* [*Die Principien der Wärmelehre*] (1896). As in other works, such as *The Science of Mechanics* (1883), in *Principles of the Theory of Heat* Mach applies ideas drawn from the theory of evolution to study the development of scientific concepts and apparatus. Mach was primarily concerned with optimizing scientific practice, as is evident from his notion of scientific economy (Pojman 2019), and he viewed education in the history of science as crucial for practising scientists.

According to Mach, historical studies reveal that current scientific thinking is contingent and transient: past conceptions were developed in response to specific problems and for definite ends, and when new problems arise, existing conceptions are abandoned so that new ones can be developed. Awareness of this process of "mutations, development and decay" makes it easier for scientists to subject their "own unconsciously formed views" to criticism, and thus to adapt and transform their thinking (Mach 1896 [1900], 5).

Mach's *Principles of the Theory of Heat* is a survey which traces the parallel development of conceptions of heat and measuring apparatus. Heat is treated as a unique problem: for Mach the sensations of experience are the primary and ultimate sources of

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[8] The only other significant reference to Mach appears in the context of language, where Fleck, discussing his concept of pre-ideas or proto-ideas, rejects Mach's conception of cognition as depending on the adaptation of thoughts to some "arbitrary external facts as revealed to an average person" (Fleck 1935a [1979], 37). Following Erich von Hornbostel, Fleck proposes that originally words were not names for objects, but were rather mental equivalents of experiences, and thus had a magical meaning.

scientific knowledge, his "epistemic base" (Cohen 1970), yet the phenomena of heat can only be directly accessed by the sense of touch, the sensations of which are variable (e.g. they are affected by antecedent states, so a cellar feels cool in summer but warm in winter, even though a thermometer indicates the thermal state is the same throughout the year). In order to attain more accurate measurements of the thermal states of bodies which are assumed to produce the sensations of heat, indirect means have to be employed, involving the sense of sight and comparisons of various substances, the volumes of which increase or decrease in relation to the sensation of heat. Mach credits Galileo with the invention of the thermometer, as he used changes in the volume of air in a glass bulb to register thermal states. In the early development of thermometry, the scale used to register thermal states was "mostly quite arbitrary", until the freezing and boiling points of water were adopted as the fundamental points of the scale. Mach credits Halley with being the first to recommended mercury as a thermometric substance, due to its constancy when measuring the boiling point of water (Mach 1896 [1900], 7-16).

Crucially for Mach, the use of volume as a measure of thermal states was—although reliable and useful—still arbitrary:

> The stronger the thermal sensation, the greater the volume of the thermoscopic substance. Hence again, by analogy, the following arbitrary definition may be set up: *Those thermal states are to be regarded as the more intense in which bodies produce in the thermoscope greater augmentations of volume.* [emphasis in the original translation] (Mach 1896 [1900], 47)

Then the adoption of mercury as a universally accepted thermoscopic substance is described as involving a "further arbitrary choice" (Mach 1896 [1900], 49). However, this system in itself, being dependent on names for points on the scale (e.g. the melting point of butter) was still inconvenient, and thus another, more convenient convention was adopted: that of using numbers to designate thermoscopic marks on thermometers. With these conventions in place, greater precision was attained, but this only led to the detection of further problems (e.g. the expansion of glass in mercury thermometers). Hence for Mach science is always "unfinished".

In Mach's account, an arbitrary convention is adopted as a solution to a problem initially arising in direct relation to sensation, then this conventional solution generates subsequent problems, the solutions to which generate further problems, and so on. The problem is that scientists and philosophers are not aware—or forget—that their scales and measures are conventions, let alone that they are arbitrary, due to the human tendency to "hypostatise their abstract ideas" (Mach 1896 [1900], 56):

It is remarkable how long a period elapsed before it definitely dawned upon inquirers that the designation of thermal states by numbers rests on a convention. Thermal states exist in nature, but the conception of temperature exists only by virtue of our arbitrary definition, which might very well have taken another form. Yet until very recently inquirers in this field appear more or less unconsciously to have sought after a natural measure of temperature, a real temperature, a sort of Platonic Idea of temperature, of which the temperatures read from the thermometric scales were only the imperfect and inexact expression. (Mach 1896 [1900], 53-54)

In Mach's complex and amorphous epistemology, sensations are real, and, being the elements of nature, they are not arbitrary; but humans have a tendency to attribute reality to arbitrary measures of these sensations. Thus, we feel hot or cold thermal states, which in Mach's terms means we feel something real, yet our arbitrary measure of these sensations, temperature, is hypostatized as an independent reality that causes them.

Conventions are arbitrary because there were and are viable alternatives. Mach provides the examples of gas volume being used instead of liquid volume, and color and thermal radiation being used instead of volume (Mach 1896 [1900], 51-72, 133-137). However, although conventions are arbitrary, in places Mach acknowledges that scientists do not exercise complete freedom when choosing which to adopt. Conventions are determined by how problems are conceived, by the existing state of knowledge and the currently existing set of conventions. The *Principles of the Theory of Heat* highlights how scientists were constrained in their thinking; for example, William Thomson's unwillingness to abandon the assumption that the quantity of heat (as a substance, caloric) remained constant—despite the fact that Mayer, Joule and Helmholtz had "clarified" the issue—is used to demonstrate how difficult it can be for scientists to adapt their thinking to new ideas (Mach 1896 [1900], 218).

However, the ultimate reason why conventions are not completely arbitrary in Mach's account of science is that they are grounded in sensation. If a scientist chooses a measure or conception that is not derived from and applied to sensation, their science strays into metaphysics. Cohen:

Indeed, knowledge is always provisional, in Mach's understanding, but nevertheless it is constructed upon an indubitable and elementary base – indubitable, that is, in the sense of being unavoidable, not in any sense of being unalterable. All conceptions which fail to relate ideas to that base are thereby suspect; their meaning is ultimately unclear, for they might be conjectures about phenomena which as yet are misapprehended, or whose apprehensions are mis-formulated, or they might be pseudo-intelligible assertions which,

upon scrutiny, lose meaning, and thus lose all possible experiential reference. And such pseudo-intelligibility is the mark of metaphysics. (Cohen 1970, 129)

Since for Mach, as an "evolutionary empiricist" (Banks 2003, 75), science is fundamentally a human adaptation to the environment, scientific theories that are riddled with metaphysical assumptions and speculations have little biological efficiency or utility. Hence the strong normative drive in Mach's account of science: Mach is not content to merely describe the practice of science; he has definite ideas concerning the role that science should play in society and how it should be conducted. With regard to the latter, rather than speculate or seek final explanations, science should only seek to describe experience, employing an extremely cautious method (Cohen 1970, 129-139). Hence, while conventions are arbitrary, choices between them are narrowed and restricted by the demands of descriptive efficiency and biological utility.

In *Principles of the Theory of Heat*, Mach provides examples of scientists who stray into metaphysical speculation: in addition to stating the facts, Dalton also allowed himself to put forward the hypothetical notion that the particles of different gases exert pressure on one another, which Mach views as a hypothesis that "can never be made the subject of experimental verification" and led to unnecessary controversy (Mach 1896 [1900], 26). Mach's famous rejection of the atomic hypothesis can be seen as a rejection of an inadmissible convention: since three-dimensional atoms were not accessible in the nineteenth century through sensation (even through the indirect use of apparatus), Mach classed them as metaphysical concepts projected into or behind the phenomena. Rather than hypothesizing atoms, the nineteenth century scientist should have used the available apparatus and conventions (a galvanometer, thermometers, scales) to observe the facts of energy (which Mach considered to be accessible to sensation (Banks 2003, 181, 227).

The above confirms Giedymin's contention that Fleck's characterization of Machist conventionalism, namely as allowing the completely free choice of concepts, is indeed a mischaracterization.

However, Fleck's charge that conventionalism "pays too little, if any, attention to the cultural-historical dependence of such an alleged epistemological choice" (Fleck 1935a [1979], 9) is more justifiable.

It is noticeable that Mach's historical survey of conceptions of heat is conducted from a position which can be described as firmly entrenched within the conceptual interior of science: after an analysis of the sensations of heat, Mach tracks the conceptual responses of individual

scientists to the problems encountered in the phenomena and conceptual problems bequeathed by other scientists. There are detailed descriptions of apparatus and experiments, but little mention of the technological constraints determining such scientific practice. In other words, Mach's descriptions do not address this process from the perspective of the external socio-economic environment, i.e. there is no acknowledgment of the fact that from the sixteenth century onwards the modes of production in European societies required ever more precise conceptions of heat, and that scientific concepts, apparatus and institutions evolved in response to this demand, as inextricable, instrumental components of an industrial revolution. Neither does Mach address the fact that science benefited from the study of technologies invented to meet the demands of industry; that Carnot's reflections on idealized heat engines were based on existing but poorly understood steam engines is a case in point (Carnot 1825 [1943])[9]. When viewed from an external perspective that traces the development of scientific concepts in their socio-economic environment, the theory of thermodynamics has to be seen as a solution to the problems posed by nineteenth century industry. McKenzie Wark summarizes this succinctly:

> Industrialization runs on carbon. Demand for carbon in the form of coal meant that miners dug deeper and deeper. Pumping water out of deep mines becomes an acute problem, and so the first application of steam power was for pumping water out of mines. Out of the practical problem of designing steam-driven pumps arises the abstract principles of thermodynamics as a science. (Wark 2015)

Mach does mention the steam engine: "Heat is capable of great performances of work. The best example of this is the steam engine" (Mach 1896 [1900], 200), but in his section on thermodynamics there is no consideration of why this 'work' is required.

As will become clearer, for Fleck such socio-economic and cultural factors do not merely drive the development of science as a practice: they also determine the formation of scientific concepts and methods themselves. Thus, from the perspective of Fleck's comparative epistemology, it is not possible to produce a 'pure' description of the history of the development of scientific concepts and theories. Such a description would of necessity in itself be determined by a socially-conditioned thought style, and the provision of an adequate account of scientific development would require this social conditioning to be taken into consideration.

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[9] Carnot: "Notwithstanding the work of all kinds done by steam-engines, notwithstanding the satisfactory condition to which they have been brought to-day, their theory is very little understood, and the attempts to improve them are still directed almost by chance" (Carnot 1825 [1943], 19).

2.3.2 The Role Assigned to Culture and History in Mach's Conventionalism

In *History and Root of the Principle of the Conservation of Energy* (1872 [1911)), Mach does acknowledge the role of custom and history as determinants of cognition.

In Chapter III Mechanical Physics, Mach questions the "mechanical conceptions of nature", by focusing on the modern notion that heat is motion (rather than a substance) to show that the conceptual scheme used to ground this position cannot also account for the (comparable) phenomena of electricity. Thus, while the conclusion that heat is motion is based on the observation that heat vanishes in proportion to the amount of work that is performed, the same argument is not used, following the observation of the work performed by electricity in a Leyden jar, to conclude that electricity is motion. Mach: "What, now, is the reason of this difference of view in our treatment of heat and electricity? The reason is purely historical, wholly conventional, and what is still more important, is wholly indifferent" (Mach 1872 [1911], 44). For Mach, electricity and other "physical things", such as water, are conceived of as substances because they are measured with scales; in other words it is a practice that is "purely historical, accidental and conventional" (Mach 1872 [1911], 46). Ultimately, for Mach the way that scientists think about scientific phenomena is "quite irrelevant"—it is entirely admissible for a scientist to think of heat as a substance, if they consider this substance to be the energy of heat, rather than the quantity of heat. It soon becomes apparent that, at its core, this issue is epistemological:

> One thing we maintain, and that is, that in the investigation of nature, we have to deal only with knowledge of the connexion of appearances with one another. What we represent to ourselves behind the appearances exists *only* in our understanding, (*Was wir hinter den Erscheinungen uns vorstellen, existirt eben nur in unserm Verstände*) and has for us only the value of a *memoria technica* or formula, whose form, because it is arbitrary and irrelevant, varies very easily with the standpoint of our culture [emphasis added]. (Mach 1872 [1911], 49)

Here Mach acknowledges that culture determines the ontological conceptions involved in the process of scientific cognition. Yet—and this is crucial for Fleck's critique of Machist conventionalism—Mach then insists that scientists' conceptions of what the phenomena of physics are *in themselves*, or "behind the appearances", has no bearing on the facts: "This way

of presentation does not alter the facts in the least *(Diese Vorstellungsweise ändert nichts an den Thatsachen)*" (Mach 1872 [1911], 49).

However, at the same time, Mach allows that these modes of conception/presentation (*Vorstellungsweise*) can in fact influence scientific investigations: "But if this way of presentation is so limited and inflexible that it no longer allows us to follow the many-sidedness of phenomena, it should not be used any more as a formula and will begin to be a hindrance (*hinderlich*) to us in the knowledge of phenomena" (Mach 1872 [1911], 49). The mechanical conception of physics is just such a limited and inflexible conception, for Mach. At the heart of his questioning of the conception of heat as motion lies the conviction that the pictorial image of molecules or atoms in motion that prevails in the mechanical conception is inherited from a metaphysics that assumes there is such a thing as absolute space for such atoms to move about in. As Eric C. Banks puts it: "This 'metaphysical' error arose by assuming those atoms were already embedded in 3-space, rather than letting space arise from their physical interactions" (Banks 2003, 33). A chief purpose of Mach's historical accounts was precisely to expose how such metaphysical assumptions had, and will continue to have, detrimental effects on the development of science.

Thus, to recap and clarify, it would seem that Mach's account asserts the following: a) scientific conceptions of what lies behind the phenomena of physics (i.e. ontological conceptions of what heat and electricity *really are*) are culturally determined and (therefore) arbitrary; and b), while they are irrelevant in the sense that they do not determine the facts; however, c) they can potentially hinder the investigation of phenomena, and prevent a fact being "known on all its sides" (Mach 1872 [1911], 58).

Many questions arise at this point. Firstly, if modes of conceiving what lies behind the phenomena can hinder the investigation of the phenomena—and Mach argues that the pictorial image of molecules and atoms in motion in three-dimensional space hinders the investigation of connections and combinations of phenomena—then why do such conceptions not have any bearing on the facts involved in such investigations, if only in terms of the selection of the phenomena to be investigated and thus the facts to be established? Secondly, what exactly is Mach's conception of scientific facts? How are facts distinguished from phenomena, if at all?

Towards the end of Chapter III, Mach comments on scientific theories in general and presents his economic model of science. At the outset, he suggests that facts and phenomena are equivalent: "If all the individual facts—all the individual phenomena (*alle einzelnen Thatsachen, alle einzelnen Erscheinungen*), knowledge of which we desire—were immediately accessible to us, a science would never have arisen" (Mach 1872 [1911], 54). The first function

of science is therefore to organize these facts economically, e.g. through the use of formulas and laws. The second function is explanatory: complicated facts are reduced to simple facts. The simplest facts are "unintelligible in themselves", meaning they cannot be resolved into, or reduced to, simpler ones; for example, the fact that "one mass imparts and acceleration to another".

When Mach provides further elaboration on these simple facts, culture and history once again make their appearance as determining factors: "What facts one will allow to rank as fundamental facts, at which one rests, depends on custom and on history" (Mach 1872 [1911], 56). He gives the example of Newtonian gravitation as a "common unintelligibility"—such fundamental facts are introduced as uncommon unintelligibilities, which initially "disturb" the community of investigators, but then they become assimilated to the point where they no longer disturb anybody.

It is clear from these passages that Mach acknowledges culture plays a key role in determining the fundamental scientific facts that are adopted and assimilated in the scientific community, but there is no consideration of why a culture would be persuaded to abandon its fundamental facts in favour of new ones, and neither is there a clear definition of facts— complex or simple—beyond their description as ultimate unintelligibilities and their contrast with hypotheses (since the epistemic base of facts is the senses, hypotheses that are grounded in the senses can be tested and become facts, while hypotheses impervious to such testing— e.g. the mechanical molecular theory—are simply "an evil").

In his reading of these passages, Robert S. Cohen concludes that the "culture-bound contingency of the empirical base compels Mach to transcend his own positivist reconstructions! […] Mach saw that a theory of history must supplement epistemology, and perhaps even complete it". Cohen's insightful final assessment is that while Mach mastered the European history of the ideas of nature, he did not explore the philosophical analysis of historical knowledge in any depth (Cohen 1970, 135-136).

When constructing his theory of thought styles through a critique of Mach's 'conventionalism', Fleck brings the constraints exerted by cultural and historical determinants to the fore. Regardless of the depth of his knowledge of the conventionalist tradition or Mach's writings, and contrary to Giedymin's charge of complete mischaracterization in this regard, in my view Fleck does indeed locate and exploit a weakness in Mach's epistemology and historical method. Fleck's postulate of comparative epistemology can be viewed, at least in part, as an attempt to add a cultural-historical dimension to the Machist conventionalist account of the history of science.

2.3.3 Facts in Mach's Epistemology

As was mentioned, Jerzy Giedymin argues that, in addition to mischaracterizing and suppressing elements of Mach's 'conventionalist' thought, Fleck also incorporates the conventionalist distinction between active and passive elements into his own epistemology. My contention is that while he does indeed draw on elements of Mach's epistemology, Fleck also problematizes the position that facts occupy in this aspect of Mach's thought. Before dealing with Fleck's conception of the active and passive elements, it is necessary to focus on how Fleck responds to Mach's ambiguous conception of facts.

In Chapter Two of *Genesis and Development of a Scientific Fact*, Fleck rejects a notion which he attributes to Mach, namely that cognition depends "on the adaptation of thoughts to some arbitrary external facts as revealed to an average person" (Fleck 1935a [1979], 27). There is also a footnote in which Fleck refers to a page of Mach's *Science of Mechanics* (1883), where Mach rejects Kant and Schopenhauer's innatist explanations of causality in favour of a more "common-sense" explanation, i.e. that: "The ideas of cause and effect originally sprang from an endeavor to reproduce facts in thought" (Mach 1883 [1893], 484). Fleck's rejection of this explanation is tied up with his conception of his proto-ideas, which is explored in Chapter 4. However, at this point it is worth highlighting that while for Mach the sensations of experience are distinct from thought, for Fleck, under the influence of Hornbostel, experience and cognition can be equivalent, especially when words have magical meanings.

In the Introduction to *Science of Mechanics*, Mach presents facts as arising through the search for uniformity and regularity in the variety of nature, the flux of sensation and the multiplicity of experience. Once humans conceived of nature as being unitary, they began to search for elements that are always the same in natural phenomena:

> By this means, on the one hand, the most economical and briefest description and communication are rendered possible; and on the other, when once a person has acquired the skill of recognising these permanent elements throughout the greatest range and variety of phenomena, of seeing them in the same, this ability leads to a *comprehensive, compact, consistent and facile conception of the facts* (*Erfassung der Thatsachen*). [Emphasis in the original translation] (Mach 1883 [1893], 5)

When the elements of phenomena are recognised as being the same, despite and throughout their varied combinations, they are thereby explained (*erklärt*), that is, no longer perplexing. Mach: "It is a process of adaptation of thoughts to facts (*ein Anpassungsprocess der Gedanken*

an die Thatsachen) with which we are here concerned" (Mach 1883 [1893], 6). The economical role of science is to classify and communicate these facts, thus saving energy.

These passages suggest that facts are regularities observed in experience, and which are recognized as such. However, it is not clear at this point whether facts are constituted in the act of recognition, or whether there are pure, experiential facts which are constituted prior to recognition. Mach's oft-repeated description of thoughts adapting to fact supports the conclusion that for Mach facts are given in experience, prior to the operations of conscious thought.

The issue of the point in the epistemological process at which facts are constituted is further complicated by Mach's notion that cognition can be "instinctive". In Chapter 1, when describing Stevinus' investigations of the inclined plane, Mach employs the terms "*purely instinctive* cognition (*ganz instinctive Erkenntniss*)" and "instinctive knowledge" to describe the origin and chief resource of science: the experience that individuals gather throughout their lifetime. Mach explicitly describes this knowledge as resulting from observation that precedes comprehension and analysis:

> Everything which we observe in nature imprints itself uncomprehended and unanalysed in our percepts and ideas, which, then, in their turn, mimic the processes of nature in their most general and most striking features. In these accumulated experiences we possess a treasure-store which is ever close at hand and of which only the smallest portion is embodied in clear articulate thought. (Mach 1883 [1893], 28)

Mach suggests that this treasure-store of instinctive knowledge, which seems to us to be free of subjectivity, becomes the source of scientific knowledge, forming the basis for assumptions, as much as—or more than—direct observation of nature. Later, Mach suggests that instinctive knowledge exerts such authority on scientific thinking that—because its source is now forgotten—it comes to be treated as existing *a priori* (Mach 1883 [1893], 83). Thus, scientific facts tend be drawn, formed and deduced predominantly from the contents of accumulated instinctive knowledge, rather than from fresh experience of the natural world.

Another passage crucial for Mach's conception of facts appears in Chapter IV, in section IV entitled *The Economy of Science* (which is also the section to which Fleck refers). Mach begins the section by returning to the schema of reproduction (or replication—*Nachbildung*): "It is the object of science to replace, or *save*, experiences, by the reproduction and anticipation of facts in thought" (Mach 1883 [1893], 481). Again, the obvious implication is that these facts

are given prior to their reproduction. After highlighting the roles of memory and writing in the economical, communicative function of science, Mach returns to the issue of facts in paragraphs that shed light on his epistemological convictions (and which are worth quoting extensively):

> In the reproduction of facts in thought, we never reproduce the facts in full, but only that side of them which is important to us, moved to this directly or indirectly by a practical interest (*aus einem praktischen Interesse*). Our reproductions are invariably abstractions. Here again is an economical tendency. (Mach 1883 [1893], 482)

Thus, between facts being given in experience and their partial reproduction in thought, an element of practical utility intervenes: the partial reproduction is determined by our present needs (Banks 2003, 130). Mach then describes the process of reproduction as one of abstraction:

> Nature is composed of sensations as its elements. Primitive man, however, first picks out certain compounds of these elements those namely that are relatively permanent and of greater importance to him. The first and oldest words are names of "things." Even here, there is an abstractive process, an abstraction from the surroundings of the things, and from the continual small changes which these compound sensations undergo, which being practically unimportant are not noticed. No inalterable thing exists. The thing is an abstraction, the name a symbol, for a compound of elements from whose changes we abstract. The reason we assign a single word to a whole compound is that we need to suggest all the constituent sensations at once. When, later, we come to remark the changeableness, we cannot at the same time hold fast to the idea of the thing's permanence, unless we have recourse to the conception of a thing-in-itself, or other such like absurdity. Sensations are not signs of things; but, on the contrary, a thing is a thought-symbol for a compound sensation of relative fixedness. Properly speaking the world is not composed of "things" as its elements, but of colors, tones, pressures, spaces, times, in short what we ordinarily call individual sensations. (Mach 1883 [1893], 482-483)

Experience thus depicted is as a flux of compound sensations, which are treated as equivalent to the elements of nature. Famously, for Mach the Kantian 'thing-in-itself' is an erroneous and pernicious conception, since 'things' are abstractions drawn from and imposed on these continually changing sensations. The natural world does not consist of objects and things: it consists of sensations (elements) in combinations and functional relationships. We organize this flux by isolating and abstracting things—as thought-symbols—and naming them.

Mach's evolutionary position allows him to posit that this tendency to abstraction has become an instinctive inheritance: beneath our ideas of cause and effect we have "a sense of causality" that was not acquired individually, but "perfected in the development of the race" (Mach 1883 [1893], 485).

The evolutionary component of Mach's epistemology further complicates the status of facts. For example, his conviction that reflex movements are examples of memory embodied outside the organs of consciousness, and his notion that the sense-organs were developed by evolutionary processes to do "part of the psychical work, and hand over the completed result to consciousness" (Mach 1886 [1959], 71, 73), are part of a biological conception of knowledge: reflex movements and sense-organs are adaptations to facts in the environment; they constitute a form of biological memory that reaches "beyond the individual". Hence, in addition to being accumulated by the individual, instinctive knowledge is also hereditary, since it is developed at the level of the "race" (Mach 1883 [1893], 1). In this conception, such instinctive knowledge must in some sense be knowledge of facts, i.e. regularities encountered in sensation.

At this point a key difference between the sociology of knowledge and Mach's brand of conventionalism can be highlighted: while Durkheim's social structures (and Fleck's thought styles) replace Kant's categories as the cognitive *a priori*, with Mach the cognitive *a priori* is biologically determined:

> […] what is *a priori* to an individual organism was *a posteriori* to its ancestors; not only does the *a priori* pre-form experience, but the *a priori* is itself formed from experience. It was simultaneously the contradiction and confirmation of Kantian epistemology. In as much as Kant used the *a priori* to explain how knowledge is possible, Mach uses the knowledge of the new sciences to explain how an *a priori* is possible. (Pojman 2019)

Hence a deeper level of determination is posited as operating: the very possibility of culture emerging—which in Mach's account involves social combination and collaboration, communication, a division of labour, a certain amount of leisure, and writing (Mach 1905 [1926], 56-62)—is dependent on the biological development of cognition.

Taking Mach's evolutionary-empiricist perspective and his emphasis on the role of abstraction into consideration, the following account of facts could be extrapolated: due to their evolutionary inheritance, human beings are equipped with embodied memory and instinctive knowledge which enables them to perceive similarities and regularities in sensation, and to abstract things from this flux, in accordance with their biological and social needs; this

abstraction eventually leads to the recognition of things, the observation of facts in experience and their partial reproduction in thought, again in accordance with wants; in turn this reproduction leads to the naming of things, a burden being placed on memory, the invention of writing, and finally to the classifications, corrections and communication of science. In such a model, all facts would be constituted cognitively, with varying degrees of precision and abstraction—ranging from dimly-sensed repetitions all the way to the fundamental facts of a culture's science.

However, this would be to ignore Mach's repeated insistence that facts are *reproduced* in thought or ideas. In *Knowledge and Error* (1905) Mach even states: "The goal of the ordinary imagination is the conceptual completion and perfection of a partially observed fact (*einer teilweise beobachteten Tatsache*)" (Mach 1905 [1926], 1). And, again:

> The representation in thought of facts or the adaption of thought to fact, enables the thinker
> mentally to complete partially observed facts, insofar as completion is determined by the
> observed part. Their determination consists in the mutual dependence of factual features,
> so that thought has to aim at these. (Mach 1905 [1926], 2)

The implication here would seem to be that there are facts to be observed in nature—waiting to be observed, given in experience—and that human beings only partially observe such facts through sensation, in accordance with their needs, and then these facts are made more complete by the operations of thought and the imagination. Mach assigns science the role of improving the "crude (*vulgäre*)" adaptation of thought to facts found in "ordinary thinking" and "incipient scientific thought". Thus, on this reading, Mach's view of cognition is almost Baconian: in its ordinary state, when completely determined by practical utility, human cognition constructs a very limited picture of the facts of nature, but through the cautious development of improved conceptions and measurements science can present a fuller picture.

It is this notion—that there are facts waiting to be discovered in nature—that Fleck rejects relentlessly. For Fleck, all facts are constituted cognitively; they have a genesis and a development, as the products of a socially-determined thought style.

2.4. The Active and Passive Elements of Cognition in Fleck's Theory

We can now finally address Giedymin's assertion that, in addition to mischaracterizing and suppressing elements of Machist conventionalist thought, Fleck also draws on the

conventionalist distinction between active (subjective) and passive (objective) elements when constructing his own epistemology (Giedymin 1986, 186).

Fleck's distinction between the active and passive elements of knowledge (*aktiven und passiven Koppelungen*—sometimes translated as 'relations', 'associations' 'linkages' or 'couplings') is problematic and somewhat controversial. It is introduced in Chapter One of *Genesis and Development of a Scientific Fact*, immediately after his criticism of Machist conventionalism.

First, in a passage that is remarkably similar to Kuhn's historical image of science and his conception of paradigms, Fleck asserts that the development of ideas is governed by "historical laws", which is evident from the fact that theories tend to pass through a period of agreement, followed by a period focused on exceptions (Fleck 1935a [1979], 9). This positing of the law-driven historical determination of scientific development is said to restrict choice, and hence constitutes another argument that counters (a somewhat mischaracterized version of) conventionalism.

Fleck then asserts that: "[…] there are always other connections (*Zusammenhänge*) which are also to be found in the content of knowledge that are not explicable in terms either of psychology (both individual and collective) or of history. For this very reason these seem to be 'real,' 'objective,' and 'true' relations" (Fleck 1935a [1979], 10). He defines such connections as "passive associations" (*die passiven Zusammenhänge*). In contrast to active associations, which are clearly 'subjective' constructions (such as the concept of syphilis as a carnal scourge), passive associations *seem* to be 'real' or 'objective' (e.g. the curative effect of mercury).

Giedymin suggests that this distinction is borrowed from Heinrich Hertz's mechanics, though Fleck makes no explicit reference to Hertz's writings. This attribution is explained by the fact that, according to Giedymin, "*Koppelungen*" is not a common expression, but it was used in Hertz's *Die prinzipien der mechanik in neuem zusammenhange dargestellt (The Principles of Mechanics)* (1894) to describe the actions of forces between systems. Poincaré analyzed Hertz's contributions to mechanics, from the perspective of conventionalist epistemology in *Les idées de Hertz sur la mécanique* (1897), part of which was included in Poincaré's *La Science et l'Hypothèse* (1902), published in German translation as *Wissenschaft un Hypothese* (1928). Giedymin concludes that Fleck could have encountered the concept of '*Koppelungen*' either directly in Hertz's *Principles* or in Lindemann's annotations to the German translation of Poincaré (Giedymin 1986, 213).

Hertz introduces the notion of coupling when describing *Systems acted on by Forces*:

450. Definition. Two material systems are said to be directly coupled (*gekoppelt*) when one or more coordinates of the one are always equal to one or more coordinates of the other. Two systems will be simply said to be coupled when their coordinates can be so chosen that the systems become directly coupled. Coupled systems which are not directly coupled are said to be indirectly coupled.

451. Corollary 1. The coupling of two systems is a relation between them which is independent of our choice, and in particular independent of the choice of coordinates. But whether an existing coupling is direct or indirect does depend on the choice of coordinates, and is thus a question for our arbitrary determination. (Hertz 1894 [1899], 183)

The key point here, as far as Fleck's epistemology is concerned, is that Hertz: a) defines a coupling as a relation between two systems that is not determined by our choice of measure (coordinates), and thus is not an arbitrary convention, but is rather determined by something inherent in the relation; and b) the determination of whether a coupling is direct or indirect is arbitrary, since this is defined by whether the coordinates of one system are equal to one or more coordinates of another, that is, the determination is derived from our choice of measure.

For Giedymin, this conception is in line with Poincaré's conventionalism, since Poincaré treats Hertz's arbitrarily determined "connections" as being equivalent to the unlimited explanations and multiplicity of models that conventionalism posits as being able to account for mechanical systems (Giedymin 1986, 213). However, this suppresses Poincaré's critique of Hertz's yearnings for the truth, which I would argue can be detected in 451. Corollary 1 above, and which Poincaré identifies in Hertz's concern that the "impregnable principles of mechanics" can be altered in response to falsifying experiments. For Poincaré, such principles, though initially derived from experiment, are now purely definitional (and thus conventional) (Poincaré 1902 [1905], 117-118)

Fleck's use of Hertz's notion of coupling also contains a realistic component: for Fleck, the passive elements of couplings are conceived of as external determinants of knowledge—elements encountered by scientists that prevent their concepts from being purely arbitrary. In Chapter Two of *Genesis and Development of a Scientific Fact*, Fleck defines the passive elements as constraints on active linkages; they "constitute that which is experienced as objective reality" (Fleck 1935a [1979], 40). In such a reading, Fleck's passive elements pin scientific acts of cognition to a reality that exists independently of human cognition: while the measures deployed by science are indeed arbitrary, there are elements in the results that are not.

Thus, the use of alcohol in the preparation of extracts is an arbitrary, active element, but the utility of this alcohol use is not arbitrary; assigning the number 16 to the atomic weight of oxygen is arbitrary, but the consequent derivation of the atomic weight of hydrogen as 1.008, in relation to the weight of oxygen, is on the one hand arbitrary—as a number, but on the other hand as a ratio it is an inevitable, passive consequence determined by that which is measured. In my view, these passive elements are a component that prevent Fleck's epistemology from being entirely relativistic and arbitrary; yet for Sady, this amounts to Fleck "bringing 'objective reality' in through the back door" (Sady 2000, 61).

Fleck's rather sketchy introduction of active and elements into his epistemology leads Kuhn to describe the distinction as "unenlightening", and he suggests it is borrowed from psychology . This is consistent with Kuhn's general, puzzling neglect of conventionalist philosophy of science, even when considering the issue of scientific choice (Kuhn 1977).

In contrast, Sady traces the distinction to Poincaré's conventionalism, comparing Fleck's active elements with Poincaré's conception of 'principles' as arbitrary, disguised definitions, with the difference being that Fleck does not conceive of these definitions as being freely chosen. Sady evaluates Fleck's notion of passive elements of knowledge as promising, since it contains the seeds of a demarcation criteria. In Chapter Four of *Genesis and Development of a Scientific Fact*, Fleck argues that myth contains few passive elements and has little concern for them, while science is characterized by its search for and incorporation of a maximum number of passive elements (Fleck 1935a [1979], 95). Ultimately for Sady, however, the distinction between active and passive elements was not fully developed and therefore lacks clarity (Sady 2016).

From textual analysis it can be concluded that Giedymin was right to trace Fleck's couplings back to Hertz and conventionalism, and the fact that Hertz and certain contributions of conventionalist thought are not acknowledged as sources or influences on his concept of active and passive linkages does amount to a degree of suppression (or at least a scholarly sloppiness) on Fleck's part. Furthermore, Sady's assessment of this component of Fleck's thought as unclear and underdeveloped is fair and accurate.

Nevertheless, in my view, it is possible—and indeed necessary—to reconstruct and clarify this element of Fleck's epistemology. Just as Mach's epistemic base of sensation, when combined with the biologized, species-specific *a priori*, prevents his epistemology from sliding into solipsism, Fleck's passive elements prevent his epistemology from drifting off into absolutist relativism. Additionally, it is through the conception of active and passive couplings

that Fleck's innovations with regard to the sociology of knowledge and conventionalism really come into sharp relief.

For Fleck—developing insights drawn from the sociology of knowledge—the active elements of cognition are determined by the complex operations of thought collectives and the existing fund of knowledge of a particular culture and society at a specific point in history, hence scientists are far more restricted than conventionalism would allow when it comes to choosing between scientific conventions (theories concepts, hypotheses, scales, measures, apparatus). At the same time, if it is granted that science is more focused on incorporating the passive elements of cognition into its fund of knowledge than other thought styles are (i.e. it strives to be more objective), for Fleck—following on from the contributions of conventionalism—science still cannot escape the fact that the active elements of its cognition are necessarily conventional and are thus constructed from arbitrary components; therefore, science (including the sociology of knowledge) can never lay claim to establishing completely objective facts.

Scientific facts are constituted through cognition, in the complex couplings of active and passive elements, wherein socially-determined conventions are actively applied to the phenomena by scientists who have been trained in a specific thought style seek out certain phenomena and see them in a specific way. While Fleck's passive elements function similarly to Mach's sensation, in that they constitute the ultimate base of knowledge and prevent the application of conventions from becoming completely arbitrary, the key difference is that in Fleck's epistemology thought collectives determine what scientists can look for and see in the phenomena, and thus what they find: the thought collective determines what passive elements can be detected, observed and incorporated into the accepted facts. Mach's image of science depicts scientists as completing and correcting the facts given in ordinary experience and recognized in thought. In contrast, Fleck's image depicts science as a creative practice which— through being open to new passive elements and having the flexibility necessary to abandon active elements and adopt new ones—has the capacity to continually discover and construct new facts.

Chapter 3: A Fleckian Framework for the Study of Cultural Change

3.1 Key Propositions and Definitions

Since subsequent chapters of this thesis will apply the key concepts of Fleck's theory of thought styles to evaluate the extent to which this theory can account for the emergence of radically new ideas in a culture—ideas which then became deeply transformative for this culture, it is necessary to isolate and analyze these concepts; to indicate the explanatory advantages they offer over alternative concepts and models (such as Kuhnian paradigms); and to identify other conceptual tools that can supplement and be incorporated the application of Fleck's theory (such as discourse analysis). Finally, the non-systematic, scattered approach to comparative epistemology found in Fleck's writings entails that a workable methodology needs to be specified and constructed on their basis.

With this in mind, the present chapter will analyze two of Ludwik Fleck's propositions and explore their implications. The first underpins his theory of thought styles and thought collectives, while the second is a programmatic, normative recommendation drawn from this theory:

1. All perception and cognition are socially conditioned; (Fleck 1929 [1979], 49) (Fleck 1935a [1979], 38)
2. Epistemology should be a comparative science. (Fleck 1936 [1986], 98)

Fleck defines a *thought-collective* (*Denkkolletiv*) as "a community of persons mutually exchanging ideas or maintaining intellectual interaction"; it is also defined as the "carrier" of a thought-style (Fleck 1935a [1979], 39, 102).

In turn, a *thought-style* (*Denkstil*) is defined as: "[…] the result of the theoretical and practical education of the given individual; in passing from teacher to pupil, it is a certain traditional value which is subjected to specific historical development and specific sociological law" (Fleck 1935b [1979], 66).

A *thought-style* is also defined as: "[the readiness for] *directed perception, with corresponding mental and objective assimilation of what has been so perceived*". Fleck also states that a thought style is characterized by: "the problems of interest to the thought collective"; "the judgment which the thought collective considers evident"; the "methods which

it applies as a means of cognition", and the "technical and literary style characteristic of the given system of knowledge" (Fleck 1935a [1979], 99).

3.2 Three Levels of Thought-styles and Collectives

Fleck presented his concept of the thought collective in 1935-1936, in *Genesis and Development of a Scientific Fact* (1935a), "Scientific Observation and Perception in General" (1935b) and "The Problem of Epistemology" (1936). At this point, three components of this concept can be highlighted.

3.2.1 Specialized Science

When focusing on the specialist science of epidemiology, in *Genesis and Development of a Scientific Fact* Fleck traces the evolution of perceptions and concepts to demonstrate that scientific facts are conditioned by socio-cultural factors and are subject to historical development.

In the case of syphilis, the facts associated with this concept developed over the span of four centuries: from an "ethical-mystical" idea grouping together several venereal diseases that would later come to be distinguished (e.g. gonorrhea, soft chancre) under the religious notion of "a carnal scourge", thereby associating an enduring stigma with syphilis; to the concept of a disease entity based on pathogenesis and etiology, which identifies syphilis with the presence of a pathogenic bacterial agent in the blood (*Spirochaeta pallida*), which was demonstrated by the Wassermann reaction. It is possible to identify components that are present in these varied, temporally distant concepts: the notion of "befouled blood" can be identified as a vague "proto-idea" of the modern understanding of infection; similarly, the idea of a "disease demon" can be viewed as a proto-idea of the modern conception of a causative agent (Fleck 1935a [1979], 25, 41).

As was mentioned in the previous chapter, Fleck sets out his theory by critiquing what he assumes to be Mach's conventionalism, crystallized in the notion that scientists are free to choose between active associations. Fleck asserts that "Sixteenth-century physicians were by no means at liberty to replace the mystical-ethical concept of syphilis with one based upon natural science and pathogenesis. A stylistic bond exists between many, if not all, concepts of a period, based on their mutual influence" (Fleck 1935a [1979], 9). Thus, for Fleck, the cultural context determines the perceptions, concepts and modes of thinking that are available to such specialists. When syphilis was first recognised in the late 15th century, European culture was

dominated by a "sociopsychological attitude" that attributed agency to a (potentially vengeful) God (and other entities or people wielding supernatural powers). This attitude was thoroughly "entrenched" in the culture, at a "deep psychological" level, and it was only after it gave way to a more empirical attitude that agency could be attributed to microscopic disease entities. A bacteriologist could only look through a microscope and 'see' a spirochaete bacterium if such a tool and the concept of microscopic disease entities had been developed in the culture, and if the bacteriologist had been previously trained to identify certain shapes with such entities, that is, had the necessary directed "readiness" (Fleck 1935b [1979], 61) to perceive such entities.

In the case of diphtheria bacilli, Fleck traces the development of the perception of these bacilli over a period of 33 years, from 1900 to 1933, to demonstrate how perception and the readiness to see evolves, and to question the notion of timeless and reliable observations. After the discovery of the bacterium in 1884, circa 1900 specialists described its shape as that of "spaced fingers, fingers of two superposed hands, letter V, *accent circonflexe*, *palisades*" (Fleck 1935b [1979], 71). By 1925, the specialists had abandoned such comparisons in their accounts, due to the blurring and chaos that resulted from analysis, and because they now saw the specific form of the bacterium 'directly'. Comparisons were then only used to train new members of the collective to see the shape of the bacilli. Fleck also asserts that this evolution in perception was accompanied by a "parallel" evolution in concepts, which determined what could be considered "true diphtheria" and what could be classed as "pseudo-diphtheria":

> This evolution of notions causes that, at present, the meaning of the words 'diphtheria bacillus' and 'pseudo-diphtheria bacillus' differ from that in 1900. Hence it is impossible to understand 'in the modern way' the sentences dating back to 1900, even the authors themselves would lose the ability to have such an understanding of their one-time utterances which they had at that time. (Fleck 1935b [1979], 72)

In this example, the perceptions and concepts of one specialist thought collective evolved with such rapidity that the concepts of the thought style of 1900—if isolated from their subsequent, gradual evolution—could not have been translated into those of 1935. Hence a specialist thought style is not just inaccessible to contemporaneous non-specialists belonging to other thought collectives—with the passage of time it also becomes incomprehensible to the specialist thought collective itself.

This leads us to another key issue, namely the problem of understanding and communication between thought collectives and across time. While the Kuhn of 1962, at the

time of *The Structure of Scientific Revolutions*, described paradigms as incommensurable, entailing that the representatives of different viewpoints are unable to completely understand each other, unless there is "a revolutionary transformation of vision" (Kuhn 1962, 103, 112), Fleck's position is more one of degree: understanding and communication between thought collectives are inhibited by both temporal distance and the distance resulting from specialization. As a concept develops over time, it becomes increasingly difficult to understand it in the way that a thought collective in the remote past understood it—hence the need for a historical and comparative approach to epistemology (Fleck 1936 [1986], 98). Consequently, in contrast to Kuhn's rigid, psychological gestalt-switch image of incommensurability (from 1962), Fleck's focus on the distance between thought collectives is more flexible and dynamic: if the distance caused by time or specialization is not too great, concepts *can* be communicated between thought collectives, but they are inevitably transformed and transformative in the process:

> As a rule communication is only possible within one collective while within kindred collectives it is feasible only with some complexity: the inter-group exchange of ideas is always connected with a more or less marked modification of the ideas. When passing from one group to another, words change their meaning, the ideas obtain a different style colouring, the sentences receive another meaning, the opinions a new value. If the groups are considerably distant from each other, the exchange of thoughts can be completely impossible, and transformation of a thought consists, in such a case, in its complete destruction. (Fleck 1936 [1986], 85)

Fleck's model of comparative epistemology is grounded in the notion of communicability or incommunicability, rather than incommensurability. Two thought styles can be compared in terms of whether their concepts communicate similar, recognizable content (meanings, values), and since transformation is inevitable when concepts are communicated between kindred thought styles and collectives, this transformation can be subject to comparison.

In this way, Fleck's focus on communication is closer to Kuhn's later reformulation of incommensurability as 'semantic incommensurability' which asserted the non-translatability of concepts. For example, Kuhn argued that the term 'phlogiston' used by Joseph Priestley cannot be translated into the modern chemical vocabulary since there is no modern equivalent of 'phlogiston'. If anyone wants to understand Priestley's writings, they simply have to learn his language. Crucially, for Kuhn, non-translatability does not entail non-comparability (Kuhn 1982) (Carrier 2004).

3.2.2 General Fields of Knowledge

While the practice of science can be sub-divided into numerous thought collectives and thought styles, Fleck employs a comparative analysis of texts to demonstrate that there are broader groupings. The "philosophers" Henri Bergson and James Clerk Maxwell might both discuss "motion" in their texts, but their concepts are fundamentally incompatible:

> The two men would be unable to communicate with each other as regards motion: Bergson looks for the 'absolute', and believes that the ideal of cognition is the experience from 'the inside'. Maxwell looks for relations to and connections with the surroundings, and his basis of cognition is a relativism. […] It becomes apparent that words have different meanings for both philosophers. At bottom, almost all words have different meanings for them: it is not as if the word of one of them meant a thing that the other would give a different name, but a thing to which one of them gave a certain name does not exist at all for the other one. That is why it is impossible to translate exactly the utterances of one of them into the language of the other one. Bergson's motion, the motion in itself, absolute motion, does not exist at all for Maxwell; there exists no word to express it, nor is there a need for it […] (Fleck 1936 [1986], 83).

And yet, while the concepts employed by these philosophers are defined as untranslatable, their thought-styles have actually more in common than the thought style of the 18th century mystic Swedenborg: "Swedenborg's moon is different from Maxwell's moon". Fleck suggests that Swedenborg's concepts were comprehensible and consistent for his thought collective, that is, for people trained to think in this specific tradition of Lutheran mysticism. In conclusion, Fleck outlines broad fields of knowledge that can be identified with certain clear thought styles:

> Thus, one should speak about a different philosophical, scientific and mystical thought-style. Each of these styles has passed through specific historical evolution, and each occupies a specific place in the mental life of mankind. We have quite a few such thought-collectives which act as carriers of more or less distinct thought styles. They are produced by separate forms of collective thinking, e.g. certain disciplines such as physics, philology, economics, or the knowledge of some practical professions such as craft, commerce, or next the knowledge of religious, ethnographic, political and other communities, the philosophical

systems of definite schools, the so-called common-sense philosophy of life, etc. (Fleck 1936 [1986], 84)

Thus while broadly defined communities (religious, political) can be identified as general thought collectives which carry less distinct thought styles, these can be divided into increasingly specific sub-collectives and sub-sub-collectives, with ever more distinct thought styles. For example: Protestants → Lutherans → Lutheran Pietists → Swedenborgians → late 18th century English Swedenborgians. At each point, members of these sub-collectives will belong to many overlapping thought collectives, for example the congregations of the Swedenborgian Church of the New Jerusalem in London, Bristol and Birmingham were associated with Methodist backgrounds and the traditions of English political radicalism (Thompson 1963) (Rix 2007).

3.2.3 General Thought Collectives

As is evident from Fleck's reference to professions, communities and common sense in the above quotation, some thought collectives are identified as operating on a more general, everyday level. Fleck specifies the minimal requirement: "A thought collective exists wherever two or more people are actually exchanging thoughts" (Fleck 1935a [1979], 44). And each individual belongs to numerous thought collectives:

> As a research worker he is part of that community with which he works. He may give rise to ideas and developments, often unconsciously, which soon become independent and frequently turn against their originator. As a member of a political party, a social class, a nation, or even a race, he belongs to other collectives. If he should chance to enter some other society, he soon becomes one of its members and obeys its rules. (Fleck 1935a [1979], 45)

According to these definitions, thought collectives can range from two clearly identifiable people who exchange thoughts, unaware of the fact that they have created a temporary and nameless collective, all the way up to a social class constituted by an amorphous group of individuals who are widely recognised as forming a social group and who—to varying degrees—may be aware of themselves as constituting such a group and may consciously identify with it.

When he classifies social classes, nations and races as examples of general thought collectives, Fleck does not provide a clear account of the ontological status of such entities, or

of how they come into existence. In other words, Fleck's writings do not explicitly distinguish the mechanisms by which thought collectives *can be* identified, or by which they *are* constructed. In the case of specific thought collectives, it can be presumed that communities are identified and constructed by political theorists, historians, sociologists or anthropologists as research objects (e.g. Marx and Engels' *bourgeoisie* of The Communist Manifesto, Malinowski's 'natives' of Mailu and Melanesia), or that they self-identify as collectives or movements (e.g. the Italian Futurists, the Black Panthers). However, the case of general thought collectives is more ambiguous.

In his *Descriptive Analysis*, Thaddeus J. Trenn observes that the general collectives of social class, nation and race do not necessarily match Fleck's (previously mentioned) functional definition – *a community of persons mutually exchanging ideas or maintaining intellectual interaction* – since such large collectives are rarely defined by the fact that they actively exchange ideas. Trenn argues:

> Fleck does not seem clearly to distinguish between the thought style as a latent dispositional state giving an enduring character to thought collectives, and thought style as an active expression of a thought collective. He does point out that long-lived thought collectives tend to have permanent thought styles, but this is somewhat of a truism. (Trenn 1979, 158)

While it has to be acknowledged that Fleck's conception of nations as thought collectives with stable and unique thought styles wanders into the realms of truism or even stereotype, it also has to be acknowledged that such stereotypes and *constructs of nations as thought collectives* do circulate in society and, furthermore, have been brought into play in the history of philosophy and science.

A case in point is the account of the Enlightenment *philosophes* overcoming national prejudice and provincial relativism—an account which depicts early 18th century France as being under the sway of Cartesian celestial vortices and irrationally rejecting Newtonian mechanics for the simple reason that it was the product of a protestant Englishman, until Voltaire persuaded his countrymen to abandon their national prejudice and use the light of Reason to accept the truth of Newtonian physics. Thus, Voltaire's *Fourteenth Letter on Descartes and Newton* can be read as addressing the relativism that arises due to scientific thought collectives being influenced by national and religious prejudice:

> A Frenchman arriving in London finds changes in philosophy as in other matters. He left a universe that was filled; he discovers the void; in Paris, they imagine a universe composed of vortices of subtle matter; in London none of this; we think it is the pressure of the moon that causes the fluctuation of the tides; the English believe that the ocean gravitates toward the moon […] In Paris, the earth is shaped like a melon; in London, it is flattened at both ends. Light, for a Cartesian, exists in the air; for a Newtonian, it comes from the sun in six minutes and a half. (Voltaire 1733 [2007], 47)

At the same time, this letter can also be read as deploying *the construct of national thought collectives* discursively. In *The Newton Wars and the Beginning of the Enlightenment* (2008), J.B. Shanks subjects the historiography of the Enlightenment to "a Foucault-inspired revisionist historical analysis", to suggest that Voltaire downplayed French engagement with Newtonian natural philosophy prior to 1728 and used strategies of 'self-fashioning' to overplay the conflict between the French and English scientific communities. According to Shanks, this strategy enabled Voltaire to construct the image of himself as the first French Newtonian *philosophe*; and this image then became a founding element of his Enlightenment mythology (Shanks 2008, 31).

However, Mordechai Feingold, being suspicious of Shanks' discursive approach, argues that Shanks himself downplays the extent of French opposition to Newton. In particular, Feingold takes issue with Shanks' assertion that "France absorbed Newton's science immediately and in substantial, if idiosyncratic, ways from as early as 1690". For Feingold, Shanks' "'France' can at best stand for a handful of people", namely a few members of Académie des Sciences (Feingold 2010, 186).

This is a clear example of the difference between a specific thought collective (members of Académie des Sciences in 1690) and a general thought collective (France as an intellectual community 1690-1726). The former is constructed as an object on the basis of identifiable individuals, whereas the latter is constructed as an abstract generalization (which can perhaps be traced back to interactive cognition which perceived patterns and regularity in the cognized). If carefully applied, Fleck's concept of thought collective is flexible enough to grasp and analyze both kinds of thought collective.

From the perspective of comparative epistemology, Voltaire's *Letters Concerning the English Nation* constitute an example of complex communication between the learned communities of London and Paris, and apart from communicating conceptual content or ideas, the letters also construct and consciously attempt to communicate a national thought style, through descriptions of the attitudes and mentality of 'the English' (characterized, for example,

by tolerance, intellectual freedom, economic pragmatism and practical empiricism)—implicitly contrasted with the thought style of 'the French' (which the reader can deduce as being provincial, backwards, intellectually uncritical etc.). The extent to which the *Letters* played a key role in the disseminating the Newtonian resolution of the Copernican Revolution in France, and contributed to the ultimate rejection of the Cartesian solution, is an issue that could be tackled by Fleckian comparative epistemology, if it considered source texts, the data of historical analysis and the discourse analysis of historiography.[10]

Perhaps the closest Fleck comes to supporting his conception of nations or class as thought collectives is his notion of "authorless" content, meaning ideas and understandings which circulated in society but "for which no original, primary components can be found" (Fleck 1936 [1986], 88). Though Fleck uses this concept to describe information that has been popularized, propagandized and circulated among the population at large, it also applies to popular conceptions of social groups and identities: it is not possible to pinpoint the creator of terms like 'the ruling class' or 'the English'. However, in Fleck's texts there is no indication of how such authorless conceptions of groups become treated as real, existing entities.

As was mentioned in 1.3.5, Fleck's conception of general thought collectives requires clarification or even correction. All thought collectives, whether specific or general, have to be regarded as the constructs of thought collectives. No general thought collective can be posited as existing 'in-itself' outside of the cognitive interaction between the cognizer, the cognized and the general fund of knowledge. Concepts of general groups, like class, nations and race can be viewed as constructs that were originally produced by thought collectives in their interactive cognition of society, but which now circulate as authorless content in the general fund of knowledge.

Thus, this thesis argues that Fleck's theory lacks a concept that explains how groups and group identities are constructed, circulated and identified. For reasons which will be presented in more detail in 3.5, it is argued that Laclau and Mouffe's theory of discourse (1985)—which was developed through performing crucial modifications of Foucault's theory of discourse—can be used to clarify or correct Fleck's conception of thought collectives. From this perspective, Fleck's thought collectives can be conceived as discursively constructed collective identities and objects of knowledge, thought styles can be viewed as sharing many

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[10] Another famous example of a national thought style being posited to account for certain tendencies in thought and science is found in Pierre Duhem's *The Aim and Structure of Physical Theory*. See in particular Chapter IV. 4. *Ampleness of Mind and the English Mind*. (Duhem 1914 [1954], 63 ff.)

functional properties with articulatory practices, and the existing fund of knowledge can be treated as overlapping with the field of discursivity.

Supplementing Fleck's theory with concepts from Laclau and Mouffe's discourse theory is particularly useful when focusing on the interaction between thought collectives, and especially when one thought style transmits its depictions of other thought styles. In the subsequent chapters, this applies in particular to Plato's antagonistic representations of poetry and 'the sophists' (Chapter 4), as well the depictions of Hobbes and Spinoza as 'atheists' and 'Epicureans' by theologians, university philosophers and natural philosophers in seventeenth and eighteenth centuries (Chapter 6).

When applied to key instances of cultural change, Fleck's concept of thought styles and thought collectives has the necessary robustness and flexibility to cope with layers of interaction, the complexity of reconstructions based on reconstructions based on reconstructions etc.—but only if the notions of discourse and intertextuality are borne in mind: while some thought collectives are constructions of concrete epistemic communities identifiable with specific individuals and distinct practices (e.g. Socrates' circle, the Stoa, Cicero's network), some thought collectives have been transmitted as less tangible constructs (e.g. 'the Presocratics') or their transmission is inseparable from antagonistic characterizations of practices and the discursive suppression of their texts (e.g. the sophists).

3.3 Common Characteristics of all Thought Collectives

3.3.1 Esoteric and Exoteric Circles

Fleck defines all "thought communities"—whether a church community, a trade union or scientific circle—as sharing certain "structural characteristics" (Fleck 1935a [1979], 108), one of these is that such communities consist of esoteric and exoteric circles. As the name suggests, the esoteric circle is the inner circle of the initiated, professionals and experts, while the exoteric is the outer circle of followers, believers, semi-professionals and non-specialists. With scientific thought collectives, initiation into the esoteric circle only follows years of training, while with other thought collectives (e.g. religious, political) there may be other initiation procedures. The relationship between the esoteric and exoteric can vary: it can be democratic and open, which for Fleck means that the elite panders to the masses, as in the case of modern science, or it can be dogmatic and secretive, as in the case of religious thought collectives. Apart from such social distance, the esoteric circle of a thought collective has to communicate across spatial and temporal distances both great and small: if people are indoctrinated into a belief system as

children, there is a good chance they will remain lifelong believers; news of the latest fashions has to be quickly disseminated to followers; (Fleck 1935a [1979], 105-7).

As Sady points out, this component of Fleck's theory has great explanatory power, as it can account for how it is possible for an individual to belong to thought collectives which may appear to be in conflict with each other at the cognitive level, or which even seem to be mutually exclusive (Sady 2000, 49). According to Fleck, it is easier for a physician (i.e. a member of an esoteric circle) to also be a devout Christian (i.e. a member of the exoteric outer circle) than it is for a physician to be a chemist, since these thought styles do not influence each other and cause psychological contradiction (or 'cognitive dissonance', in contemporary parlance), whereas being an esoteric expert in two kindred thought styles could cause in interference resulting in the incapacitation of thought:

> If thought styles are very different, their isolation can be preserved even in one and the same person. But if they are related, such isolation is difficult. The conflict between closely allied thought styles makes their coexistence within the individual impossible and sentences the person involved either to lack of productivity or to the creation of a special style on the borderline of the field. (Fleck 1935a [1979], 110)

This conception of mutually incompatible thought styles which can co-exist in one individual, due to the distance between the thought styles and the individual's position in the esoteric/exoteric circles, easily accounts for the contradiction between the radical astronomical hypotheses found in Copernicus' *Commentariolus* and the conservative Aristotelian physics found in *De Revolutionibus*—a contradiction that Kuhn consistently stresses to support his model of gradual paradigm shifts (Kuhn 1957, 148). As a mathematical astronomer, Copernicus was clearly a member of an esoteric circle, while in terms of his cosmology and physics his place was exoteric. [11]

Likewise, the conception also sheds some light on how, as F.M. Cornford contends, the ancient Milesian School could offer demythologized accounts of nature that were simultaneously underpinned by the religious conception of *Moira* as Destiny (Cornford : the supposition is that these thinkers were the esoteric representatives of a new thought style, who had no doubt been initiated in the exoteric circles of a religious thought collective.

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[11] This schema only partially accounts for Newton's occult writings, which were written in parallel with the *Principia*: both genres could be classed as esoteric, though very distant in many senses. See, e.g. http://www.newtonproject.ox.ac.uk/texts/newtons-works/alchemical

3.3.2 Collective Mood

Trenn's reference to a "latent dispositional state", cited above, signals another key element of Fleck's theory, namely, the assertion that all thought collectives are bound together by a 'collective mood':

> The force which maintains the collective and unites its members is derived from the community of the *collective mood*. This mood produces the readiness for an identically directed perception, evaluation and use for what is perceived, i.e. a common thought-style. At the same time it is the source of that feeling of the intra-group mental solidarity mentioned before, of that specific comradeship with produces the '*comrade*', '*countryman*', '*coreligionist*', '*colleague*' etc. Something contrary is the feeling of hostility to the '*stranger*', to a man who worships foreign gods, uses foreign words devoid of the charm felt within the collective. (Fleck 1936 [1986], 101)

It is clear from this conception and elsewhere (Fleck 1935a [1979], 142) that for Fleck collective mood is prior to directed perception: it produces the readiness for it. Collective feeling or mood functions as a kind of non-rational glue that binds the collective. According to Fleck, in scientific thought collectives this mood is "expressed as a common *reverence* for an ideal—the ideal of objective truth, clarity, and accuracy" (Fleck 1935a [1979], 142). Fleck turns the kind of analysis familiar from sociological studies of religion—such as those of Durkheim and Lévy-Bruhl—on science itself. The reverence that scientific thought collectives have for the ideal of objective truth is compared with emotional phenomena commonly associated with religious thought collectives: the ideal of objective truth is described as a "belief", scientists are said to devote themselves to science, which has a "tradition" and indulges in "hero worship" (Fleck 1935a [1979], 142).

This reverence is bound up with the affect with which the terms employed by a thought-collective are laden. The terminology of a particular thought-style takes on a "sacramental power":

> It is a fundamental matter that the technical term expresses, within the relevant thought collective, something more than what corresponds to its logical definition: it possesses a certain specific power, being not only a name, but also a slogan or a symbol; it possesses something I would give the name of a specific thought charm. One can easily convince oneself of this by substituting for the technical term, a description with the same meaning, but without that specific sacramental power, without that charm: 'king' is something more

than 'person in authority'; 'master' is something more than 'man who has mastered a certain skill'; 'element' is something more than the 'component brick' etc. (Fleck 1936 [1986], 99-100)

Thus, in Fleck's view, the practice of science is maintained and animated by factors that are not reducible to logic; by conduct that cannot be classed as more rational than the conduct of other thought collectives.

It can be surmised that when studying the emergence of a new thought style, comparative epistemology would attempt to track the development and use of terms to which collectives attach a high degree of ritualized affect, such as 'hypothesis' and 'observation' in the natural philosophy concerned with the Copernican turn, or 'experience' in British empiricist discourse.

3.4 Changes in Thought Styles

Hans Jorg Rheinberger argues that Fleck does not have "a very convincing response" to the question of how major changes in a thought style arise (Rheinberger 2010, 31). In a similar vein, Sady suggests that a clear account of how a scientific thought collective undergoes a revolutionary transformation of its thought style is lacking in Fleck's writing (Sady 2000, 69). It has to be acknowledged that Fleck's conception of change is certainly not as clear-cut or straightforward as Kuhn's conception of paradigms shifts. However, in my view, it is possible to demonstrate that in the years 1929 to 1936 Fleck made concerted efforts to develop and improve his account of change, and to make it more capable of elucidating complex phenomena. Fleck's own efforts in this direction can also be continued, therefore it is possible to reconstruct Fleck's dispersed account and present a clarified model.

3.4.1 Strong Individuals and Acts of Creation

In one of his earliest papers, *The Crisis of Reality* (1929), Fleck tackles a major conceptual problem that arises as a consequence of his theory. If scientific thought is socially conditioned, that is, if "the social realm" conditions what the individual perceives and cognizes, through educating the individual in the traditions of a community's style of thought (Fleck 1929, 49), then how does a new style of thinking emerge? If individuals can only think in the way that the community has trained them to think, how can they begin to think in new ways?

In answer, Fleck submits that some "strong" and "creative" individuals can exert a great influence on the thought collective, to the extent that their style becomes *the* style of the collective:

> If the individual was strong enough, and his qualities were not only those of a pioneer but those of a leader, then his style became universally accepted into the body of science. In this way the scientific style and recognized scientific practices became codeterminant agents in the formation of scientific reality. (Fleck 1929 [1979], 51)

Fleck then enumerates some factors that can affect this individual "agency"—namely "conventionality, tact and intuition". He suggests that research requires "moderation": a balance must be struck between "consistency" and "criticism", which lead to one-sidedness or sterility, respectively. It is not clear what conclusions can be justifiably drawn from this passage, but a possible reconstruction is that normal research (anticipating Kuhn's picture of conservative, normal science) requires a fine balance, or point of equilibrium, between the creativity of the individual and the dogmas of the inherited and instilled thought style.

In order to account for the emergence of new modes of thinking in science, such as Vesalius's revolutionary contribution to anatomy, Fleck invokes the power of individual creativity. The appearance of a new science, or a new style of thinking within a science, is explicitly cast as a problem:

> In great creative moments, however, the newly emerging science is simply an artistic creation that one can only admire and never 'prove' and determine 'objectively'. For there never existed nor exists a scientific demand for fundamental changes because each moment already has a superabundance of fundamental content. [...] I am thinking, for instance, of Vesalius' idea to dispense with a completely elaborated, a hundred percent consistent, highly respected science, and consistently build a new one from confused, unstable, changeable, intertwined masses of flesh, such as the scholars of that time would have considered beneath their dignity even to touch. (Fleck 1929 [1979], 53)

According to this account, Vesalius's challenge to Galenic anatomy did not arise from "a scientific demand", i.e. a need that was recognized in the community of physicians, since the existing knowledge and practice were fully sufficient and consistent, at least for the dominant scientific thought collective.

Thus Vesalius is cast as a heroic individual, who battles both the accepted knowledge of "the mighty scientists" and his own "ingrained veneration for Galen and tradition" (Fleck 1929 [1979], 53-54). Fleck even goes as far as to assert that Vesalius's contribution to anatomy had far-reaching social significance: "This was a battle for democratic values, and Vesalius has created for it the method, the style of thinking, and thus he had laid the foundations of the democratic general reality that was free of deep mysticism, of sentimental poetry, of grand affections" (1929 [1979], 54). In *The Crisis of Reality*, Fleck offers no other explanation for such a revolutionary change than this individual creativity. Though he warns that we must not be oblivious to the social-historical elements of science, he does not mention any contextual factors that may have triggered or contributed to Vesalius's innovation, nor does he allow that Vesalius might have responded to demand for more accurate and effective anatomical knowledge, either from within the community of physicians or wider society.

3.4.2 Intellectual Unrest

Fleck returns to the example of Vesalius in *Scientific Observation and Perception in General* (1935). Following his elaboration of the concepts of thought style and thought collective, as discussed in 3.3, Fleck turns to the issue of changes in a thought style. This time, rather than presenting Vesalius as creating a new style single-handedly, Fleck focuses on one of his precursors: 'Berengar', though without providing any contextual detail.

'Berengar' refers to the surgeon and physician Jacopo Berengario da Carpi, c. 1460 – c. 1530, also known as Giacomo Berengario da Carpi, Jacobus Berengarius Carpensis, and Carpus (Choulant 1852 [1920], 136). The classic scholars of pre-Vesalian anatomy Ludwig Choulant and L. R. Lind refer to him as "Berengario".[12]

According to Choulant, Berengario was a doctor and a teacher who claimed to have dissected hundreds of bodies and "was the author of the first illustrations made from nature" (Choulant 1852 [1920], 136-137). Lind describes him as "the best philological anatomist of the pre-Vesalians" (Lind 1975, 161), due to his comprehensive assessment of Greek, Latin and Arabic anatomical terminology. Lind also recounts some of Berengario's case histories, which suggest that he was particularly focused on, and regarded as an expert on, the uterus:

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[12] Berengario's illustrations in *A Short History of Anatomy* (*Isagogae breves)* (1522) can be viewed at: https://www.nlm.nih.gov/exhibition/historicalanatomies/berengario_home.html

> He publicly dissected a young and beautiful pregnant woman who had been hanged at Bologna; for four days before her execution she had had intercourse and he found intact sperm in her matrix, proving that it opened in coition. […] In one instance he attended a woman with a large tumor in her uterus […] and mentions the fact that he dissected many non-pregnant female cadavers. (Lind 1975, 162)

In Fleck's essay, Berengario is first used an example of a thought style that is alien to 'us', due to the use of metaphors and symbols in his descriptions. This is evident from Berengario's metaphorical description of the heart: "For the dignity of the heart prevails over other parts since it is the chief of all the members and is called the sun of the microcosm because it illuminates the other members with its spirit. The heart has an especial heat. It certainly beats and has motion as if it were a living creature" (Carpi 1530 [1959], 95). Secondly, for Fleck, Berengario is an example of an individual caught up in the *intellectual unrest* that must precede any change in a thought style:

> One cannot, simply and immediately, see something new and different. First the entire thinking style must be changed, the entire intellectual mood must be unsettled, and the brute force of the directed mental readiness must cease. A specific intellectual unrest must arise and change the moods of the thought-collective, which the necessary condition for creating simultaneously the possibility and necessity of seeing something new and different. (Fleck 1935b [1979], 74-75)

Fleck asserts that Berengario's opposition to the Galenic thought style was not based on anatomical details, but was rather a matter of principle, though Fleck provides no further details on this point. For Fleck, this period of intellectual unrest is one of contradictions: for example, some individuals acknowledge that the innovators are correct on the anatomical details, but still side with Galen, due to his ancient authority.

> This intellectual unrest of the society of anatomists in the period preceding the new epoch is reflected in individuals: this is perfectly visualized by Vesalius's precursor Berengar, who is full of contradictions, ever retreating and terrified by his own discoveries. […] Were it not for this period of unrest, Vesalius would have failed to find people who would listen to him: it would have been impossible to attune the society, i.e. to create a new intellectual mood which would enable new forms to be seen. (Fleck 1935b [1979], 75) (Fleck 1935b, 75)

According to this account, then, the emergence of a new thought style has to be preceded by the appearance of a new intellectual mood, and a new intellectual mood arises from intellectual unrest, characterized by a "dissimilarity of views" and "a tendency to change". Fleck's notion of 'intellectual unrest', thus conceived, has some similarities with Kuhn's conception of science during periods of crisis. There is a significant difference, however.

In Kuhn's 1962 conception, a period of crisis arises when scientists begin to recognize that the quantitative data gleaned from observation contradict the expectations dictated by the prevailing paradigm. It is the dominant paradigm that determines what constitutes an anomaly. Kuhn: "Anomaly appears only against the background provided by the paradigm" (Kuhn 1962, 65). In a period of crisis, a new paradigm emerges which can better account for such anomalies; once the new paradigm is accepted, a period of normal science follows, until the accumulation of anomalies becomes intolerable once again.

The accounts of "exceptions" or "contradictory views" that appear in Fleck's writing are not entirely consistent. On the one hand, in *Genesis and Development of a Scientific Fact*, Fleck asserts that "observations contradicting a view are 'explained' and smoothed over by conciliators", and even that experts deliberately conceal "exceptions" [*das Verschweigen einer »Ausnahme«*] from the public (1935a [1979], 30-31). Here the similarity with Kuhn's conception of anomalies is obvious. On the other hand, however, Fleck also stresses the role that suppression plays in perception, cognition and observation: "To recognize a certain relation, many another relation must be misunderstood, denied, or overlooked" (1935a [1979], 30) In other words, a thought style determines *what cannot be seen* as much as it determines *what can be seen*. To make Fleck's account more consistent, it can be suggested that a thought style entails varying degrees of conscious resistance, ranging from entirely unconscious suppression of incompatible phenomena to deliberately concealed phenomena that are consciously recognized as incompatible with the prevailing "system of opinion" or scientific theory. Here scientific thought styles are characterized as fulfilling psychological needs: "logical conformity within a system at any costs", or "wishful thinking" (1935a [1979], 31-32), but the question remains – how do scientists come to observe an exception [*Ausnahme*], i.e. phenomena that are incompatible with their thought style?

In *Scientific Perception and Observation in General*, Fleck suggests that in order for a scientist to see something new, first the thought style has to collapse into chaos, contradiction and intellectual unrest, and then a new thought style has to begin to emerge before something new can be seen:

[…] there arises a certain intellectual unrest and a tendency towards changes: a chaos of contradictory, alternate pictures. The picture, fixed up to now, disintegrates into blots which arrange themselves into different, contradictory shapes. […] It depends on the intensity of feeling of the investigator whether the fact, whether the new shape will appear to him within this chaos as a symbolic vivid vision, or else as a weak hint of a resistance which inhibits the free, almost discretional choice between alternate pictures. […] It is necessary to create directional interests, and to destroy inimical interests. One has to create another mental readiness and to educate people to live in it. (Fleck 1935b [1979], 76-77)

Thus external shocks and intellectual unrest weaken or remove the resistance that prevent scientists from observing exceptions and phenomena incompatible with the logical system of their thought style. Thus there would only be a need to explain such phenomena away or conceal them from the public during periods of intellectual unrest and chaos, when there are competing systems or a transition between thought styles. As in *The Crisis of Reality*, in *Scientific Perception and Observation in General*, individual agency is credited with playing a crucial role in such periods: it is the individual's intensity of feeling that determines whether the new thought style will arrive as a vivid vision or gradual weaking of resistance.

What is lacking at this point in Fleck's account is any explanation of the factors that contribute to a shift in intellectual mood and unrest. In a footnote to his description of how a fact arises, in *Genesis and Development of a Scientific Fact*, Fleck adds that: "great transformations in thought style, that is, important discoveries, often occur during periods of general social confusion" (Fleck 1935a [1979], 177) and cites the Early Renaissance and the years after World War I as such periods. Again, Fleck does not explore factors that lead to periods of 'general social confusion'; perhaps he deemed such an account unnecessary.

If Fleck's somewhat vague terms of intellectual mood and unrest are to be adduced as factors that can account for changes in thought styles, then it is necessary to supplement the analysis of source texts—Fleck's default research technique when considering distant thought styles and collectives—with principled reference to historical and historiographical studies. Such studies obviously have to be treated with caution, since the historical facts they refer to have been constructed and filtered through the layered interaction of temporally distant thought styles, and are deployed within discourses that have distinct purposes and agendas. However, bearing Fleck's epistemology in mind, it is still possible to identify some passive elements that form the basis of historical facts, and to reflexively bear in mind the complex interactions occurring between thought collectives and within thought styles.

If Fleck's concepts are applied to Vesalius's innovations, there are many facts and factors that can be associated with the intellectual mood and unrest of this period, and that can therefore be posited as determining the changes in thought style that evidently occurred during Vesalius's lifetime. Potential determinants can be explored through exploration of the following topics: a) the return to dissection, b) printing innovations, and c) the University of Padua. The next sections will attempt to indicate how Fleck's account of Vesalius could be updated in the light of scholarship focused on these areas.

a) The Return to Dissection

In his provocative *The Anatomical Renaissance* (1997), Andrew Cunningham challenged the progressivist image of Vesalius as the heroic innovator who single-handedly rejected the ancient authority of Aristotle and Galen and launched "modern, scientific, anatomy" (1997). Thus Cunningham's argument cuts against Fleck's first account of Vesalius, as the strong individual who dispensed with "a completely elaborated, a hundred percent consistent, highly respected science" and built "a new one" (Fleck 1929 [1979], 53). To contest such conceptions of the Vesalian moment as a revolutionary discontinuity or switch, Cunningham's counter thesis is that Vesalius's project was actually to revive Galenic anatomy, but in a more pristine and accurate form. By comparing Galen's On Anatomical Procedures with the structure of Vesalius's Tabulae and Fabrica, Cunningham argues that Vesalius loyally followed Galen's dissection procedures, functional divisions and bodily systems. Of course, Vesalius famously detailed over three hundred of Galen's errors in Fabrica, and was involved in public controversies with Galenist loyalists over discrepancies between Galen's texts and what could be observed from dissection, but, according to Cunningham, Vesalius's aim was to show that Galen's errors resulted from his practice of dissecting and vivisecting animals, rather than dissecting human corpses, which he was unable to do.13 In other words, Galen was not truly Galenic in his practice (Cunningham 1997, ch. 4).

On this reading, Vesalius's contributions to anatomy can only be conceived as revolutionary insofar as they involved the adoption of certain *practices* associated with dissection, pedagogical methods, and text production techniques. His theoretical innovations were restricted to his rejection of textual authority and his methodology focused on 'errors'; they did not extend to a critical overhaul of guiding principles.

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[13] On factors preventing Galen from performing human dissection, see (Nutton 2020, 21).

In terms of dissection practices, Vesalius's innovations were introduced in the midst of more widespread innovation that had begun two hundred years prior to the publication of the *Fabrica* in 1543: Mondino de' Luizi/Mundinus had introduced the dissection of humans into the curriculum at the University of Bologna (1315); annual dissections had been established the statutes of Montpellier University (1340) and the University of Padua (1465) (Siraisi 1990, 86-88); as mentioned above, Berengario had produced detailed anatomical descriptions and illustrations based on human dissection in *A Short History of Anatomy* (*Isagogae breves*) (1522); and in 1536 Vesalius's Paris teacher, Johann Guinter, had published a short, cutting edge textbook on Galenic anatomy that made reference to dissections—Vesalius rated this work highly, as he revised and published it to accompany his 1538-39 lectures (Nutton 2018, 46). Nancy G. Siraisi suggests that this new-found appreciation of dissection was inspired by renewed focus on the works of Galen, but also concludes that such dissections were mainly performed for instruction purposes rather than as part of investigations of the body (Siraisi 1990, 86-90). Vivian Nutton situates Vesalius within the university movement of "new Galenism": he was trained as a Galenist, edited Galen's texts for publication, and was generally accepted by his peers because they saw his work as "a continuation of the empirical and experimental methodology that Galen had advocated but been unable to put into practice" (Nutton 2012, 417).

The university movement of new Galenism can be situated within the broader specialist movement of 'medical humanism', which in turn can be positioned within the broader movement of 'Latin humanism'. Though Nutton (2021) cautions that the study of Latin humanism has been neglected in favour of scholarship focused on the Hellenist revival, and stresses that the term 'medical humanism' is still problematic and imprecise, some key 'facts' have been constructed that are indicative of extensive changes taking place in European society. Firstly, the rediscovery of lost medical texts (e.g. Celsus' *De medicina*) and the printing of Galen's Greek texts (e.g. the Aldine version of Galen in 1525), shed new light on aspects of ancient medicine, such as Alexandrian dissection and Galen's Platonism, which had been unavailable to, or suppressed by, medieval or Islamic authors.

The awareness that Greek manuscripts were incomplete and inaccurate had significant consequences: scholars began searching for Greek manuscripts, there was renewed focus on accuracy and comparison, and it was recognized that Latin translations, in particular the 1490 edition of the Latin *Opera omnia Galeni*, had to be revised, leading to the boom in Latin translations of Galen and Hippocrates in the 1520s. Crucially, in 1526, Erasmus published his "versions of three small Galenic treatises that appealed to a non-medical audience" (Nutton

2021, 3). The printing revolution and the demand for Latin translations were key factors that made the latest medical knowledge accessible to physicians and practitioners who lacked the competence to read Greek: "it continued to be through the medium of Latin translation that most physicians were enabled to participate in intellectual discussions about Galen and their ancient heritage. Latin versions of classical texts sold more widely […]" (Nutton 2021, 4).

The transmission of knowledge from the esoteric thought collective focused on Greek and Latin manuscripts to the broader exoteric thought collective that required this knowledge for more practical purposes occurred thanks to networks of translators, editors and printers, and commercial networks that stored, distributed and sold books at fairs and shops throughout Europe (Nuovo 2013). Thus Vesalius's innovations were made within an already innovative thought style (new Galenism) that was part of a broader revolution in the transmission and consumption of knowledge (medical humanism, Latin humanism), which was itself indicative of revolutionary transformations in the modes of economic and cultural production.

In this period of innovation and revolutionary transformations, Vesalius's originality lay, according to Cunningham, in his insistence that Galenic anatomy had to return to human dissection in order to resume investigation of the human body and, crucially, correct Galen's 'errors' where necessary. Vesalius framed this project as a return to Hellenistic practices (but obviously not to the legendary Alexandrian practice of human vivisection (Longrigg 2003, 179-190) (Nutton 2013, 133-34)). As Vesalius stressed in *Fabrica* and *The China Root Epistle*, Galen's errors were due to the fact that he had dissected monkeys and ungulates, rather than humans; hence Vesalius could claim to be vindicating the "Ancients" and rooting out Galen's later "misrepresentations" (Vesalius 1546 [2015], 114). This emphasis on human dissection as a resumption of ancient practices was inseparable from Vesalius's most disruptive methodological reversal, namely his reallocation of authority from Galen to the human body: "The body is a better text than Galen, and where Galen differs from the text of the body, then Galen must be ignored" (Cunningham 1997).[14]

It was this displacement of authority that brought Vesalius into direct conflict with other, older representatives of the Galenic thought style, such as Professor Matthaeus Curtius at the

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[14] Vesalius's own words: "When Galen cut up his monkeys and saw that they differed from the description of the ancients, who trained themselves on human dissections, he did not scruple to state that they had not seen that fiber of the lung and who knows what else. I should therefore be thought more impious if I had not vindicated those Ancients with a true description of the human fabric. If because of the powerful devotion to Galen under which I labor and my special regard for him I were to leave his opinions everywhere undisturbed contrary to the testimony of my eyes and the truth of the matter, I should be willing to have my generation wander in confusion like all the ages that have followed Galen, and let his misrepresentation of the Greeks go undetected" (Vesalius 1546 [2015], 114).

University of Bologna and his former teacher Jacobus Sylvius (Jacques Dubois). In the public dispute between Sylvius and Vesalius, two main issues were at stake: whether Galen dissected humans, and whether Galen made errors. In *The China Root Epistle* (1546), Vesalius went into great detail to demonstrate that Galen "did not teach the fabric of the human body", but instead based his account on the study of apes. With regard to errors, Vesalius explicitly argued that anatomists should trust their own eyes rather than "the authority of Galen" . In one of his responses, Sylvius seems to acknowledge the discrepancies between Galen's description of the human body and contemporary observations, because he argues that such discrepancies must be due to changes that had occurred in the human body over the centuries, caused by "variations in airs, waters and places over time" (Cunningham 1997). Through this ingenious adjustment, Galen's infallibility could be maintained in the face of, and be reconciled with, the evidence provided by contemporary dissection. The points to be stressed here are firstly that the change in the thought style of European anatomists occurred precisely and explicitly in a dispute over authority, and secondly that repositioning the body as the primary, authoritative text redirected the anatomists' thought style and allowed new information and images to enter the field of investigation.

Textual and diagrammatic evidence can be adduced to show how Vesalius gradually came to free himself from the hold of Galen's textual authority. For instance, Bataille et al. (2007) analyzed Vesalius's illustrations and applied his dissection procedure to the *rete mirabile* in sheep to track Vesalius's growing scepticism with regard to Galen's descriptions. So, in 1538, in the *Tabulae Anatomicae, Tabula III*, Vesalius simply followed Galen and drew the *rete mirabile* at the base of the human brain. In the *Fabrica* of 1543, Vesalius corrected this error by denying the existence of *rete mirabile* in humans (he had observed this network of vessels in sheep and oxen but not humans) and reproducing Galenic drawings with sceptical comments (Bataille, et al 2007, 766-67). In 1546, Vesalius made his criticism of Galen on this point more explicit, describing his statements on "the reticular plexus" as "absurd".

At the same time, however, while Vesalius was able to reject Galen's authority when it came to specific anatomical features of the human body, his fundamental loyalty to Galen's structural divisions, assumptions concerning function, and dissection procedures, continued to direct his perception. In Fleckian terms, the guiding assumptions of the Platonic-Galenic thought style still determined Vesalius's "readiness" to perceive certain anatomical elements and *not* perceive others. Thus, as Cunningham highlights, Vesalius, following Mundinus, maintained the Platonic-Galenic three-venter division of the human body which assigned significance to the diaphragm as a border between the middle and lower venters; and in terms

of anatomical *function* adhered to Galenic assumptions about the three independent bodily systems (brain and nerves, heart and arteries, liver and veins) . In both the *Tabulae* and *Fabrica* Vesalius follows Galen in treating the heart, lungs and trachea as one system, that is, a set of organs united in the function of respiration; and in presenting the veins and arteries as separate systems—the former transporting blood, the latter—*aer* or spirit (Cunningham 1997). Galen's influence even determined how Vesalius perceived and depicted the lungs: as surrounding the heart—in Book 6, Fig 6 of the *Fabrica* (Vesalius 1543 [1973], 181). This influence extends beyond the visual representation of perception into textual description: Vesalius's definition of the pulmonary vein as the structure which "brings air from lungs to the left ventricle" can be described as thoroughly Galenic .

Moreover, Vesalius externalized Galenic assumptions about anatomical *structure* in his texts and public rituals. Galen's somewhat impractical general dissection sequence, as outlined in *On Anatomical Procedures*—proceeding from the skeleton-muscles, to the nerves-veins-arteries, and then the internal organs (Galen 1999), is faithfully replicated in the structure of Vesalius's *Fabrica* (Book 1: The Bones and Cartilages; Book 2: The Ligaments and Muscles; Book 3: The Veins and Arteries; Book 4: The Nerves, etc.) and re-enacted in the procedure Vesalius followed in his public dissections.

Recall that according to Fleck's model scientists can only see something 'new' if their thought style becomes "unsettled" (e.g. through communication with other thought styles, due to a change in intellectual mood and intellectual unrest). Thus, when applied to more detailed and critical historical accounts of Vesalius's contributions, Fleck's framework justifies two main conclusions. Firstly, that the thought style of professional anatomists underwent significant fracturing and transformation between 1538 and 1546, due to Vesalius's public downgrading of Galen's textual authority, which allowed new passive elements to be perceived and acknowledged (i.e. the 'fact' that the *rete mirabile*, the plexus of arteries and veins present in sheep, was not present in apes and humans). Secondly, however, Cunningham's reframing justifies the conclusion that despite heated disputes over authority and practices, the thought style carried by university-based anatomists, which can be provisionally designated as "medical humanism" (Cunningham 1997, 88) (Nutton 2021), was still fundamentally unified and Galenic in the 1540s. Therefore, even Vesalius and his students—that is, those most committed to trusting their own eyes, those who reclaimed the practices of Alexandrian anatomy to position their project and practices in opposition to the older generation's new Galenism—still saw the human body through the invisible lenses bequeathed by the Platonic-Galenic strand of ancient anatomy. These inherited, unquestioned assumptions concerning

bodily systems and functions actively directed the thought collective's perception of the human body, inhibited the perception of alternative content, and were externalized in the structures of printed material and embodied in ritualized procedures.

This cursory analysis of scholarship focused the history of anatomy shows that Vesalius cannot be straightforwardly depicted as single-handedly transforming the prevailing thought style, or as simply abandoning the conservative thought collective centered around the University of Paris for the innovative thought collective at the University of Padua. In other words, the progressivist narrative framing can only be maintained if certain key details are suppressed (e.g. the innovations of new Galenism, Vesalius's Galenic representation and description of the heart), or if it is possible to demonstrate that Vesalius questioned the Platonic-Galenic principles underlying his own approach to the study of anatomy—but the scholarly consensus from Barcia Goyannes (1994), through Cunningham (1997), to Nutton (2018) and (2021), leans towards the position that the Vesalian Revolution, despite the vitriolic anti-Galenic rhetoric of *The China Root Epistle*, remained fundamentally Galenic.

In contrast to the contemporaneous Copernican Revolution, which proceeded from an esoteric critique of fundamental assumptions (1509-14, 1543) and took centuries to be accepted and implemented in practice, the Vesalian Revolution sprang from the intersection of innovative practices and technologies in 1538-46 and was almost immediately accepted. Factors such as the public nature of Vesalius's dissections, the involvement the student body, public pamphlet wars, and institutional support, combined with Vesalius's exceptional talents, determination and forceful personality, ensured that the Vesalian Revolution was swiftly communicated from esoteric to exoteric circles. The acceptance of Vesalius's innovations is reflected in book sales—especially of the *Epitome*—a condensed version of the *Fabrica* (Duffin Wolfe 2014), in student expectations at Padua and Bologna in subsequent decades (Klestinec 2004), and in the construction of sixteenth and seventeenth century anatomy theatres, for example at Padua and Leiden (Persaud, Loukas Shane Tubbs 2014, 90).

However, the fact that the Vesalian Revolution left the assumptions of Galenic anatomy intact and was limited by its singular focus on human anatomy is reflected in subsequent developments, such as the fact that the next major breakthroughs came through a revival of Aristotelian anatomy, which was institutionalized by Hieronymus Fabricius at Padua and continued by his pupil William Harvey in England. Fabricius's discovery of the *ostiola* (valves) in human veins (1603) and Harvey's discovery of the circulation of the blood (1628) were reached as a result of a return to Aristotelian comparative anatomy and a refocusing on 'the Animal' rather than 'the human fabric' (as reflected in the title of Harvey's masterpiece

Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus). From this perspective, Vesalius's project was limited to description of structure, and lacked an account of action and purpose (Cunningham 1997, ch. 6). Harvey's vivisection of numerous poor animals (dogs, eels, pigeons frogs), and his experiments on living humans (ch.13), were undertaken due to the conviction that the dissection of human bodies was not sufficient" "it is proper to more closely consider the matter and to study the motion of the heart and arteries not only in man, but in all animals that have hearts, to investigate and discern the truth by frequent appeals to vivisection and careful observation" (Harvey 2017). The fact that Harvey refers to Galen throughout his text—e.g. to refute his conception of the connection between the heart and lungs, to reject his functional account of the liver, veins and arteries—indicates that Galenic assumptions were still firmly in place eighty-five years after Vesalius's *Fabrica*. In turn, however, Harvey's critique of Galen's functional assumptions from an Aristotelian perspective entailed that Aristotelian assumptions and concepts escaped analysis: the heart as the foundation and source of growth, Hippocratic-Aristotelian *pneuma* can be detected in Harvey's statement that arterial blood is "impregnated with spirits" (Harvey 2017, ch. 8). The persistence of 'animals spirits' in Descartes' natural philosophy (1632) and Thomas Willis's neurology (1660-72) Caron 2015) can be explained through Fleck's concept of proto-ideas: the ancient concept of *pneuma* was transmitted through the Vesalian Revolution, the Aristotelian revival, Cartesian natural philosophy, to English empiricism, as spirits/animal spirits—in other words, escaped critical analysis, until the concepts of 'oxygenated blood' and 'nerve impulses' became available due to developments in "the existing fund of knowledge" (Fleck 1935a [1979], 38).

Thus if Fleck's account of Vesalius is to be updated, taking the above reflections into consideration, the change that occurred in the anatomists' thought style in the 1530s and 1540s has to be identified as partial: a revolution in method, cultural production and pedagogical practices, but not in the basic assumptions of Galenic anatomy. Cunningham convincingly argues that these assumptions can be traced from Galen back to Plato's *Timaeus*, hence to a project focused on the *human* body as the home of the immortal and immaterial soul, rather than on the animated soul of the universal animal explored in Aristotle's comparative project (Cunningham 1997, ch. 1). The emergence of modern anatomy thus involved competition between rival thought styles (new Galenism, Vesalian, Fabrician Aristotelianism) which defined themselves differently by returning to ancient thought styles (Platonic-Galenic, Alexandrian, Aristotelian) and taking on their assumptions.

b) Printing Innovations

The combination of graphic illustrations with textual descriptions was an innovation that both Berengario and Vesalius made use of in their anatomical works. This cutting-edge print technique was based on two techniques that were first developed—in the European context at least[15]—in the fifteenth century: woodcut printing (c. 1400) and movable type (c. 1450). Woodcut techniques were significantly developed by the artists Albrecht Dürer and Titian in the first decades of the sixteenth century. It was then recognised that woodcut and movable type could make a perfect combination:

> Because the printing of movable type, like the woodcut, is a relief process, once the printing
> press and movable type were invented in the mid-fifteenth century, woodcuts provided the
> ideal means for illustrating early printed books. The woodblocks could be placed alongside
> the type in the flatbed press and printed at the same time. (Thompson 2003)

Vesalius made use of these techniques in his first published anatomical illustrations, the *Tabulae Anatomicae Sex*, produced in Venice in 1538[16], which consisted of six large sheets with drawings and explanatory captions. According to Vesalius himself, the sheets were produced in response to demand from students who wanted to refer to them during the classes (Saunders O'Malley 1950, 16). The sheets thereby came to function as pedagogical tools: Vesalius could refer to them while simultaneously lecturing and dissecting—a practice which was itself a key innovation, and students could refer to them before, during and after lectures: "The possibility of obtaining such essential material beforehand was a new development that further stresses Vesalius's novelty and his conviction of the unity between what was heard or read and what was seen" (Nutton 2018, 45).

As is typically the case when new technology is introduced into an established educational setting, Vesalius's use of illustrations is reported to have been a source of inter-generational conflict:

> […] many of the leading physicians of the day were actively opposed to the illustration of
> the printed word on the grounds that this had not been done in classical times and would

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[15] Metal movable type appeared in China and Korea at least two centuries before Gutenberg's invention of the printing press. On the history of print in China, see: *Knowledge and Text Production in an Age of Print: China, 900–1400* (ed., ter Haar van Crevel 2011), and in Korea, see: *Engraving Virtue: The Printing History of a Premodern Korean Moral Primer* (Oh 2013)*.

[16] The *Tabulae Anatomicae Sex* can be viewed here: http://special.lib.gla.ac.uk/anatomy/vesalius.html

degrade scholarship. Technical incapacity and the lack of development in standards of reproduction gave support to such opposition, but it was now to become apparent that if not the professors, at least the students quickly became aware of the value and power of graphic anatomical demonstration. (Saunders O'Malley 1950, 16)

This passage highlights a key feature of the intellectual unrest indicated in historical and biographical accounts: antagonism between the younger generation of students, who responded to Vesalius's hands-on approach and encouragement of close-up participation, and the older generation of professors who sought to maintain their authority over anatomical knowledge, their control over the curriculum, and their distance from students. In her essay on anatomy theatres in the sixteenth-century, Cynthia Klestinec suggests this conflict was part of university life for decades: in 1540, students at the University of Bologna sided with Vesalius against Matheaus Curtius in the conflict over Galen's errors and authority; then in the 1590s students at the University of Padua complained about Fabricius's organ-focused demonstrations because they were "focused not on the technical skills of dissection or the dissection of the whole body but on the philosophical principles that the anatomical parts reflected" (Klestinec 2004, 378).

The figure of Vesalius came to symbolize the challenge of the younger generation, thanks to the accounts of his students, his own polemicizing and self-representation, and the tendency to position Vesalius as an absolute turning point in the history of science. One of the most famous images of Vesalius is that found in the title-page of the *Fabrica*, where he conducts a dissection surrounded by a throng of students, while the "greybeards have been relegated to the back" (Cunningham 1997, ch. 4). The image carefully constructed by Vesalius, propagated by his students and contemporaries, and then reconstructed in historical accounts from the facts surrounding the publication of his books, textual analysis etc., has become an image symbolizing a tectonic cultural and cognitive shift. Thus, we have the image of Vesalius willing 'to get his hands dirty' in the ritual of dissection, where he symbolically broke own class barriers by fusing the mental labour of the Lector and the physical labour of the Sector, a role previously performed by lower-class barber surgeons (Ghosh 2015); we have the image of Vesalius as the entrepreneur immersed in the grubby world of commerce, overseeing the production of his book, investing his own money to ensure he got exactly what he wanted, berating the printer, making staggeringly detailed corrections (Nutton 2012); the image of dexterity and practicality conveyed through Vesalius's emphasis on the importance of the hand, as "the instrument of instruments" (Cunningham 1997), etc.,—all of which accrue and consolidate to create a cultural icon that symbolizes a revolution in mentality and practice: an individual who embodies

a switch from the useless theorizing of the older generation to the practical application of the knowledge-hungry younger generation.

These images of Vesalius and his revolutionary practices were transmitted by the cutting-edge print technologies that had been adopted in Northern Italy, and particularly in Venice, were book production reached "a genuinely industrial scale" (Nuovo 2013, 2). These technologies, and the mercantile practices associated with them, breached the walls of the universities and changed their function. During the Lutheran revolt and in its wake, this disruptive mode of cultural production had enabled textual transmission that escaped, bypassed and challenged the control of the Church authorities. Vesalius's use of printed sheets within the university and his publication of the *Fabrica* exploited a new potential afforded by this mode of cultural production: knowledge produced within the university could be transmitted quickly and directly to other universities, but also into society at large. Thus universities could take on a new function in addition to that of producing professional clergy, teachers, lawyers and physicians: if they were connected with the commercial networks outside the university walls, they could also become centres of knowledge production and dissemination. Vesalius's embrace of commerce, print technologies and disruptive pedagogical and communicative practices can thus be positioned within a broader revolution in knowledge production and consumption that was undermining authority and beginning to transform the institutions of medieval-feudal society.

The classic Marxist account presents the Renaissance and the scientific revolution as a heroic struggle between the "burgher" class and the feudal system (Marx Engels 1987, 474). From this macro-level perspective, Vesalius's innovations have to be viewed as superstructural interventions and situated within a wider struggle between the merchant class and the feudal nobility for control over the institutions of power: the state, the Church, the universities (or the ISAs—ideological state apparatuses (Althusser 1995 [2014])); a struggle which in turn has to be reduced to social relations and positions determined by productive forces and control over competing modes of production.

However, cursory close-up analysis of the city-states in Renaissance Italy reveals that, in contrast to territorial states like England or France, where the hierarchical demarcations of feudal society were more clearly defined and stable, in the case of the Italian city-states it is often impossible to draw distinct lines between the merchant class and the ruling class/ nobility/ feudal aristocracy, particularly in Northern Italy, where merchants and bankers had come to control the machinery of the state and church institutions, and in the case of the Medici even the papacy—hence the use of terms such as "mercantile oligarchy" and "mercantile nobility"

when describing Venice (Brown 2000). Furthermore, the power of the ruling classes cannot be attributed to a single mode of production: while the wealth of Lombardy and Milan was based on agriculture and livestock, that of Florence was based on the wool trade, artisans, and banking, while Venice drew its power from maritime trade, and the production and trade of arms (Braudel 1989 [2019]). Thus, given the complex power struggles and fluid social relations within the city-states, in context of the intense rivalry between the city-states of northern Italy, in the midst of the invasions by foreign territorial states which beset Italy between 1494-1559, and against the backdrop of the Lutheran revolt, the concept of class conflict and the designations 'burgher/bourgeois class' have somewhat limited explanatory power.

Peter Burke's historiographical synthesis of the scholarship on Renaissance Venice, which frames the Venetian publishing industry as just one component of "a regime of information and communication" founded on Venice's unique position as a commercial port, center of a maritime empire, and crossroads between East and West. Burke identifies the presence of foreigners and subcultures as critical factors which led to the rise Venice as a cosmopolitan publishing centre: movable type came to Venice via the diaspora of German printers; Venice was "the principal gateway through which the ideas of the German reformation reached Italy" (2000, 396); and it was a center of publishing in ancient Greek, Hebrew, Spanish, Slavonic and Croat, and of producing translations of Arabic books. Due to its maritime supremacy, Venice was also the source of printed information about the Americas, the East (e.g. Marco Polo), Persia, and the ascendant Ottoman Empire. According to Burke, this polyglot printing, and the trade and circulation of economic and political information, was grounded in the unique nature of the Venetian Republic: rather than a feudal-agrarian state, it was a "mercantile state" that was dependent on the network of merchants that had become increasingly powerful in the fifteenth century (2000, 306-404).

Since the category of bourgeois social class does not do justice to the complexity of the phenomena determining social and cultural change that occurred the Venetian Republic in the 1530s and 1540s, the concept of *commercial networks* can be considered as an alternative research tool. As deployed by Angela Nuovo in *The Book Trade in the Italian Renaissance* (2013), the term 'commercial networks' denotes the transnational system of book commissioning, production, distribution and sales that emerged in Northern Italy, and particularly in Venice, from centuries in which mercantile culture and practices were allowed to flourish. 'Bookmen' and the book trade developed in Venice due to anti-monopolistic legislation, the absence of a guild, a privilege system that protected small businesses, and the avoidance of prepublication censorship. These conditions encouraged migration from all over

Italy and the immigration of skilled entrepreneurs and technicians from Germany and France (Nuovo 2013, 1-5). By the 1530s Venice had become the center for a transnational and cosmopolitan network of agents, commissioners, printers and booksellers which formed the infrastructure through which the Republic of Letters disseminated its humanist content. The merchants involved in the book trade have tended to be overlooked in historical accounts because "they were not inclined to self-representation" and their "their production of books might make them seem to resemble too closely professions that were considered 'mechanical' (that is, involving manual labour) in the Renaissance" (Nuovo 2013, 4). Thus, the glamorous superstructural innovations of Latin humanism, medical humanism etc. were grounded in a more anonymous infrastructural transformation and collaboration closer to the messy economic base.

In a later study, Nuovo infers from dedications, papal privileges, counterfeit copies, and even dowries, in order to reconstruct the networks of printers, scholars, manuscript collectors, bibliophiles, editors and students involved in huge publishing projects in the years preceding Vesalius's *Fabrica*, such as Aldus Manutius' edition of Aristotle's works. Publishers like Manutius, whose great and well-attested erudition compensated for his involvement in merchant practices, were keenly attuned to public demand and responded with innovations, such as *enchiridia*—portable volumes of classic texts "designed for easy readability, printed in a new typeface, the italic, which Aldus thought more intimate and pleasing to the eye" . Thus the commercial networks involved in book production and trading were composed of individuals who belonged to intersecting and overlapping specialist thought collectives (merchants, technicians, artists, scholars), but the networks themselves created an interface between the esoteric thought collectives constituted by scholarly communities and the exoteric thought collective constituted by the general community of the increasingly literate public. The communication of Vesalius's innovative practice-oriented thought style to both specialists and the more general epistemic community was thus made possible by an innovative mode of production that emerged on the basis of an established, flourishing mercantile culture, and that operated due to complex collaboration and communication throughout the whole process, from commissioning through to sales and consumption.

Though Vesalius stamped his personality on the *Fabrica,* and by all accounts micro-managed the artists, block-cutters and printer involved in its production, often remotely, the publication and distribution of this huge 700-page book was very much a collaborative effort, involving the complex commercial and communication networks that had been installed across in Europe by 1543, as well as cooperation between the representatives of distinct but aligned

thought styles—anatomists, physicians, natural philosophers, humanist scholars, artists (e.g. Jan van Calcar, a pupil of Titian, is credited with drawing the skeletons and dissections in Vesalius's *Tabulae* and *Fabrica* (Nutton 2018, 45)).

It can be construed as significant that Vesalius, after having had the *Tabulae* printed in Venice in 1538, chose to have his *Fabrica* published by Johannes Oporinus, a Swiss publisher based in the then Protestant city of Basel. This choice entailed transporting the woodcuts from Venice—where they were produced—to Basel, on the other side of the Alps, and also necessitated extensive back-and-forth correspondence as Vesalius sought to supervise the printing remotely. In the fifteenth century, Venice had been the leading printing center of Europe, but by the sixteenth century the city was becoming eclipsed by other centers, such as Paris and Basel (Burke 2000, 398) (Saunders O'Malley 1950). Basel emerged as the cutting-edge printing center for illustrated books, largely due to the publications of Johann Froben (1460-1527), which included the *Opera* of Galen. Oporinus, who was a trained classicist and had taught Greek at the University of Basel before entering the book trade, had a reputation as a meticulous, innovative and daring printer (e.g. he was imprisoned for publishing the first Latin edition of the *Koran*) (Saunders O'Malley 1950, 21-22). Thus the circumstances in which Vesalius' book was produced testify to operation of key factors contributing to intellectual unrest in the social formation: intense competition in the modes of technological and cultural production, a highly-developed and collaborative communication infrastructure, and transnational networks that connected individuals and communities that were often geographically remote and culturally heterogenous, but that were nonetheless united in their attitude to innovative knowledge production.

c) The University of Padua

As shown above, the heroic myth of Vesalius abandoning the Galenic thought collective in Paris to join a more empirically-oriented thought collective in Padua, thereby single-handedly creating the new thought style of modern anatomy and observation-based science, can only be maintained through suppressing or ignoring key aspects of Vesalius's thought—textual features, assumptions, production circumstances. If the Vesalian Revolution is characterized as predominantly a revolution in scientific and pedagogical practices, facilitated by a revolution in the mode of cultural production—as argued above, the role of the University of Padua should be investigated from this perspective. In other words, how did the University of Padua facilitate Vesalius's return to dissection and his challenge to the authority of Galen's texts?

Siraisi (1990) identifies some key institutional features of the University of Padua which contributed to its rise as a main disseminator of innovative ideas and practices in the fifteenth and sixteenth centuries. A crucial circumstance is that Padua was closely associated with the University of Bologna, which, along with Paris and Montpellier, was a main center of academic medical education from the thirteenth through to the sixteenth century. Padua and Bologna were not only connected through the constant circulation of medical faculty between these institutions, which continued into Vesalius's time—e.g. his controversial demonstrations at Bologna during the lectures of Curtius in 1540 mentioned above, but they also shared key organizational characteristics that determined the composition of the student population and the kind of instruction that was provided.

Firstly, with regard to the former factor, the University of Bologna had originally formed from two separate guilds or corporations: a professorially-controlled doctoral college reserved for Bolognese citizens, and a student-controlled *universitas* that was open to students from all Italian regions and other countries. These 'aliens' self-organized to form over twenty 'nations' on the basis of "ethnic and geographical origin -- the Franks, Picards, Provenals, Alemanns (Germans), Angles, Spaniards, and others", which eventually consolidated into two main corporate bodies – those from north of the Alps and those from the south Berman 1982, 124). The Bologna structure and system was "transplanted" to other cities, including Padua, Pisa, Prague, Cracow and Heidelberg (126). Following the rise of the German universities in the fourteenth and fifteenth centuries, Bologna and Padua began to attract significant numbers of students from German-speaking regions: students would begin their studies in the philosophy and medical faculties of German universities and then cross the Alps complete their medical training in northern Italy. By the fifteenth century, 30-40% of the degrees awarded at Padua went to students from northern Europe. As a result of this open policy, by the fifteenth century Padua was home to the largest community of medical students in Europe (Siraisi 1990, 64).

Secondly, Bologna and Padua can be distinguished from Paris in terms of the style and content of the teaching, as well as the control exercised over it. The faculty of theology dominated the University of Paris, entailing that medical and theological training tended to be combined, whereas at Bologna and Padua theological training was taken care of by local religious communities, and the most important institutional relationship was between the medical faculties and the arts faculties. Crucially, "the needs and interests of the medical professoriate and students usually predominated in these organizations" (Siraisi 1990, 65-66). Hence the medical and arts faculties came to be institutionally linked in a single university and doctoral college. According to Siraisi's reconstruction, priority was assigned to philosophical

teaching, rather than theological training, as it was deemed more relevant, and in the fifteenth century Padua became a significant center of philosophical teaching in its own right (1990, 69).

Given the context of Latin humanism and the rise of new Galenism, the evident appeal and success of Bologna Padua justify the provisional conclusion that medical studies and the medical profession were becoming more highly valued in the culture, and that this reflected needs felt in the societies of northern Italy and north of the Alps. More broadly, following Bourdieu (1993), it can be hypothesized that the popularity of the medical faculty at Padua, reflected in the number of foreign students and the indeed presence of Vesalius—a Fleming who was considered to be "a northerner, a 'German'" (Cunningham 1997), indicates a flow of cultural capital away from theologically-oriented institutions and modes of cultural production, towards more practically-oriented institutions and the production and consumption of applicable knowledge.

In the historical accounts, the student universitas at Bologna is depicted as an organization that exerted considerable power over the curriculum and professorial body:

> The student universitas, or corporation, or guild, received from the city of Bologna a charter which permitted it to make contracts with the professors, to regulate the rents of student lodgings, to determine the kinds of courses to be taught and the material to be covered in each, to set the length of lectures and the number of holidays, to regulate prices for the rent and sale of books. The professors were paid directly by the students in their respective classes (Berman 1982).

In other words, the student body was an authority constituted by paying customers who often had very clear expectations regarding what and how they wanted to learn. Thus, there was a very clear conflict of economic interests between students and the professoriate, as well as competition and antagonism between professors. This situation entailed constant struggles over authority, as evidenced by students' accounts of Vesalius's demonstrations for Curtius's lectures at Bologna in 1540, students' accounts of his simultaneous lecture-dissections, and later by the complaints made against Fabricius at Padua (Cunningham 1997) (Klestinec 2004). It seems plausible to suggest that this unique teaching context involving empowered students, inter-generational antagonism and professorial rivalry was conducive to Vesalius becoming increasingly bold and explicit in his criticisms of Galen's textual authority between 1538 and 1546.

Kenneth Bartlett enumerates some factors that made the University of Padua unique in the years around 1543. Firstly, Venice was to a large extent free from papal interference, and this freedom was extended to the University of Padua: "The faculties were increasingly subject more to the Venetian Senate than to the Archbishop of Padua, and the cosmopolitan atmosphere drew students of various backgrounds, nationalities, and even religious beliefs" (Bartlett 2018, 6) According to Bartlett, the University continued to accept Lutheran students following Luther's excommunication in 1521, and Italians with reformed beliefs were not prevented from obtaining degrees. This policy was in line with Venice's policy of treating heresy as a political matter. This religious tolerance can be attributed to a more profit-oriented approach that focused on money rather than religious affiliation. Cunningham argues that the university "was run as a business": it aimed to attract foreign students, was sensitive to their complaints regarding the quality of teaching, and adopted the policy of 'double professors', who lectured on the same subjects at the same time, to encourage competition (2018, 87).

Thus, when considering the determinants of the changes that Vesalius introduced to the thought style of new Galenism, the University of Padua can be identified as contributing in three main ways. Firstly, the University's well-attested policies concerning human dissection— provided for in the university statutes in 1465, and with anatomy made a major subject in the 1530s-40s (rather than an annual event) as part of the embrace of medical humanism—allowed Vesalius to turn the ancient practice of human dissection into a participatory educational ritual in the anatomy theatre. Secondly, in a period in which authority and fundamental assumptions were being challenged—e.g. Copernicus (1509-14, 1543), who studied medicine at Padua in 1501-03, the Lutheran Reformation (1517)—the University of Padua was a communication hub in the two-way transmission of innovative idea between northern Italy and German-speaking regions. Thirdly, the institutional arrangements, authority distributions and inter-generational antagonisms within the University itself were conducive to questioning the authority of Galen's texts, especially when this authority was upheld by older professors who refused to get their hands dirty in the practice of dissection.

<p style="text-align:center">∗∗∗</p>

This exploration of the return to the practice of dissection, of the role of printing innovations, and of the communicative-pedagogical practices facilitated by the University of Padua, supports the thesis that Fleck's concept of intellectual unrest can be used to shed light changes in thought style if a variety of historically-oriented disciplines—in this case Renaissance studies, cultural

history, the history of science and philosophy etc.—are carefully consulted to identify the external determinants of thought and text production. This thesis argues that such determinants do not merely provide additional contextual information about thought styles: rather, they are factors that shape and facilitate the emergence of new thought styles, that are embedded and entangled in the thought collective's adoption of new practices and ways of thinking.

3.4.3 Proto-ideas

In *The Problem of Epistemology*, and *Genesis and Development of a Scientific Fact*, Fleck adds another component to his account of the emergence of scientific thinking, namely "proto-ideas or pre-ideas" (Fleck 1935a [1979], 23).

As mentioned previously, Fleck describes the notion of "foul blood in syphilitics" as constituting a hazy proto-idea for the modern conception of a disease entity detectable in the blood. Fleck traces the proto-idea back to the theory of dyscrasia, which held that diseases were the result of the humors being combined in "noxious, foul mixtures". While the theory was abandoned as a general explanation for diseases, in the case of syphilis it became more "substantial and precise" (Fleck 1935a, 11, 23). The key element of a proto-idea that can be gleaned from these passages is that it begins as a hazy, general notion, or it is combined with other ideas in such a way that prevents conceptual precision.

Then Fleck lists further examples of proto-ideas in other fields of science: Democritus' concept of the atom is identified the proto-idea of atomic theory; the theories of the elements, the spherical earth, and sun-centered solar system are all described as developing from "hazy proto-ideas" (Fleck 1935a [1979], 24).

Fleck warns that not all modern scientific ideas developed from proto-ideas (e.g. isomerism), and not all proto-ideas actually developed into the modern ideas that seem similar, since the underlying concepts underlying these ideas are actually dissimilar (e.g. ancient pregnancy tests based on urine).

He also warns against assessing proto-ideas as right or wrong when judged in terms of current criteria of truth and validity. To do so would take the idea from its "socio-cogitative foundation" and out of its "chronological context":

> Any absolute criterion of judgment as to suitability is as invalid for fossilized theories as a chronologically independent criterion would be for adaptability of some paleontological species. The brontosaurus was as suitably organized for its environment as the modern lizard

is for its own. If considered outside its proper environmental context, however, it could not

be called either "adapted" or "unadapted". (Fleck 1935a [1979], 25-26)

The truth and validity of ideas can only be assessed in terms of the criteria that are internal to a thought style. When there is significant or great temporal distance between thought styles, there is little common ground between a proto-idea and its descendent concept—in terms of the underlying assumptions, content, rules of validity or social function. (Here Fleck comes close to Kuhn's conception of incommensurability defined as a lack of a common measure (Kuhn 1982, 670)).

At first sight, atomic theory seems to be a clear and rare example of when a thinker from antiquity 'got it right', yet the very conceptual essence of the atoms postulated by Democritus, namely that they cannot be 'cut' into smaller elements, was completely abandoned in Rutherford's planetary model of the atom. From Fleck's perspective, to say that Democritus was 'right' either forgets that such a judgment is made from the perspective of one's current thought style(s), the central tenets of which will no doubt be abandoned in the future; or such a judgment makes a claim to an absolute position, free of any social and contextual determination, i.e. unbound by any thought style, which is simply impossible, according to Fleck.

In *The Problem of Epistemology*, Fleck revisits his concept of proto-ideas through an analysis of the development of the notions of heat and cold. His first point is that if we read old medical books dating back to the 16th century, or books on alchemy, we cannot simply replace the archaic concepts contained therein with our modern equivalents. The ideas expressed in such texts are inextricable from elements that we class as symbols, mystical correlations and clumsy arguments; the texts seem to us to imbued with "a strange mood of bombastic seriousness", and if we come across a description of a phenomenon that we think we can identify, e.g. an account of the plague that seems to describe syphilis, this will be embedded in other details that seem completely irrelevant to us (such as animals falling ill and meteorological phenomena). Thus: "the description cannot be transposed into today's thought language" (Fleck 1936 [1986], 89). (Again, this notion of incommunicability shares similarities with Kuhn's notion of semantic incommensurability).

However, Fleck's second point is that, at the same time, in the midst of such alien clusters of mood and views, it is possible to distinguish elements which would come to develop genetically (rather than logically) into our "present-day notions". He analyses the varied conceptions of heat and cold contained in a 16th century medical book to conclude that the examples of heat found in fire, temperament, spice, bodily warmth and hunger are "identical",

as are the cold of weather, temperament, fear and death. In this thought style, the connection between 'life' and 'fire' is not just symbolic:

> *Everything that excites, that increases vitality and all symptoms of vitality, is linked in some way with heat, or rather not separated from heat, from fire.* There is in it an implicitly contained view that 'fire' and 'life' are conjugated in a certain way, by no means a figurative or symbolic one; they are in its essence; to a certain extent identical (Fleck 1936 [1986], 91) [emphasis in the original].

Fleck suggests that as time went on, these proto-ideas of heat and cold became "differentiated and divided", so for example the "physical meaning" of heat became separated from the "figurative meaning", and the thought style of modern physics developed the physical meaning into "the energy idea of heat".

For Fleck, such developments are arbitrary; they are not determined by logical or objective necessity, but rather by historical contingency. Therefore, according to Fleck, who seems to be echoing Mach on this point, the development of modern science could have taken different paths. He suggests that the conception of heat as a chemical element could have been preserved, which would have had led to entirely different developments in physics and chemistry (though it is hard to see how, as Fleck speculates, the persistence of the concept of 'caloric' would have made solving the problem of the transformation of the elements simpler) (Fleck 1936, 92). Another speculation is more intriguing: Fleck suggests that if the notion of life had taken a morphological direction rather than a functional one, thus if life had been defined as the ability to produce specific shapes, rather than the ability to produce energy through combustion, then crystals would now be classed as living.

The last element that Fleck adds to his conception is that in proto-ideas words are "spontaneous transpositions of experiences" (Fleck 1936 [1986], 94). Inspired by Erich von Hornbostel, Fleck suggests that with proto-ideas, words are not names for things, employed in logical deductions, but they rather function as real equivalents. In the conviction that life and fire are identical, words transpose the direct experience of this analogy, invoking the "magical equivalent" of the experience.

The notion that the words associated with proto-ideas were employed with different rules of performativity and signification in magical and mythopoetic thought styles is one that clearly has explanatory potential, for example when exploring the transition from *mythos* to

logos in Ancient Greek writings. However, it is at this point that some inconsistencies emerge in Fleck's thought.

Following his assertion that the analogy between life and fire is a direct experience of this analogy, Fleck continues:

> It is a vision of the thought-collective, which shocks its mental life so profoundly that it cannot be rejected any more. Being itself without any stable sense, since it provides the mutual relation of notions whose content has not yet been established, it becomes a guiding principle for assigning this content. Before the content of the notion 'life' had been fixed, there was an unclear proto-idea of the identity between the essence of life and fire. This unclear thought became the guiding principle of the development of the notions of life and fire (Fleck 1936 [1986], 94).

But for whom was this proto-idea and thought unclear? Given that Fleck's own theory of thought styles asserts that a later thought-style cannot but interpret the concepts of an earlier thought style other than through the lens of its own socially-determined assumptions, a proto-idea only appears as unclear to the thought-style that is interpreting from the outside; it cannot be assumed that from within the thought-style, i.e. for the thought collective of sixteenth century physicians, the idea of life-fire identity was unclear or vague, and seemed to lack stability and/or content: the idea was, like the brontosaurus, determined by and adapted to its social environment.

On the basis of Fleck's own theory, the only way that an idea—which a later thought-style identifies as a proto-idea for its own, current ideas—could have been perceived as unclear to the thought collective that created the idea, is if this thought collective was in the midst of a period of intellectual unrest, when various contradictory ideas are proposed and are the cause of dispute within the thought collective.

An example of this could be Copernicus' heliocentric model, which took over 150 years to be generally accepted by European scientific thought collectives, in part due to its lack clarity concerning the model's quantitative advantages, but also because it had to compete with the contradictory counter-models of Brahe and Descartes. Thus it is possible to depict the Copernican system as a proto-idea that appeared unclear to members of the target thought collective; an idea that operated as a guiding principle for the thought collective as it sought the clarity provided by proof. However, Fleck does not mention intellectual unrest in his accounts of proto-ideas, being content to restrict his explanation to the notion that vague ideas operate as a guiding principle.

Another possible example could be, following Lévi-Strauss' taxonomy of magical, mythical and scientific thought (Lévi-Strauss 1958 [1963]), periods when a thought collective was in the midst of a major shift in the type of thought style employed to process its experience, for example if a dominant mythical-poetic thought style began to give way to a more rational-scientific thought style. If a thought collective came to adopt a substantially new style of thinking (in contrast to its dominant thought style undergoing minor adjustments), one can conclude that during the period of transition the new, emergent style of thinking would inevitably maintain and contain elements of the old thought style. In which case, it is conceivable that members of the thought collective would find these hybrid ideas vague or otherwise unsatisfying. The Socrates presented in Plato's dialogues would be a perfect example of an individual who finds the new ideas emerging his thought collective to be hazy and unclear. However, again, Fleck does not discuss such major shifts in thought styles when discussing proto-ideas.

This study suggests that Fleck's concept of proto-ideas can be used, with caution, in two main ways. First, concepts can be inherited and maintained by thought styles until developments in the existing fund of knowledge renders them incompatible and obsolete: as was previously suggested, the ancient concepts of *pneuma* or animal spirts can be viewed as a proto-ideas that were communicated across millennia, being present in the writing of Vesalius, Harvey and Descartes, until concepts such as oxygenated blood and nerve impulses became established. Secondly, some authors explicitly designate an ancient concept as the basis for their own reworking. Thus, for example, Hegel's explicit depiction of *Bildung* as an updated version of the Greek concept of *paideia*, as defined by Plato's reconstruction of Protagoras (see Chapter 5), justifies treating *paideia* as a proto-idea that was reactivated and developed by eighteenth-century German theorists. Hence in the subsequent investigations, the concept of proto-ideas is sometimes used to track communication between thought collectives across time, especially in the case of transitions to new thought styles; and to consider explicit reformulations of older concepts recovered from the existing fund of knowledge.

3.4.4 The Circulation of Ideas

The fourth and final element that Fleck posits to account for changes in ideas and thought styles is that in the process of communicating ideas both within a thought style and between thought styles, these ideas undergo significant transformations and acquire new meanings.

Within a thought-style, an idea undergoes transformation as it is communicated from the esoteric specialist elite to the exoteric general population (the "crowd" of non-experts,

amateurs). Here the change is that of popularization, whereby an idea that requires training for detailed understanding becomes adapted to the popular understanding: "[…] now circulating within the crowd the new thought interferes with the mental store and adjusts itself to the specific style of the thought-collective" (Fleck 1936 [1986], 87). This is called the "legitimization transformation". Fleck suggests that when a thought style is stable for a period of time, the popular circulation of ideas can involve "minimal transformation", but when there is unrest (manifested in shock and creativity) the circulation is destroyed until a new process of transforming circulation begins. Unfortunately, Fleck provides no examples of how an idea is transformed during such popularization.

When an idea is communicated between thought-styles, random and unpredictable transformations occur:

> The intended circulation of ideas, motivated by a desire to communicate, is not the only possibility. Other social forces, *inter alia*, the force of curiosity, result in the thought reaching a recipient for whom it had not been intended. Such unintentional circulation of ideas is very important from the standpoint of the sociology of thinking, and it is linked to the most outstanding alterations, sometimes with a complete change of the meaning. Words and sentences pass from one thought-collective to another, transferred by an individual for whom they had not been intended, and their meaning during this migration changes sometimes to such an extent that only a loose, distant similarity remains. (Fleck 1936 [1986], 87).

Fleck provides examples of this form of circulation. When an idea is received by another collective, it can take on a mystical air, or become the subject of ridicule, as when it is caricatured. Other, more significant changes also occur:

> […] the content changes sometimes beyond recognition, even if the word has remained unchanged. May I give as an example the word and the notion of 'race', which has been transferred from the natural science or anthropological style to the political one. (Fleck 1936 [1986], 88)

This migration of ideas between thought collectives, which leads to creative mutations, takes place due to simplification and the fact that individuals belong to multiple thought collectives. However, although individuals play an instrumental role in transmitting ideas between thought collectives, the transformations can ultimately be classed as 'authorless':

[…] *some elements of up-to-date thought content may be authorless.* Out of the understandings and misunderstandings, out of repeated transformations and recastings, a creation arises, during social circulation, for which no original, primary components can be found. (Fleck 1936 [1986], 88)

Thus, one element of change is the fact that communication between thought collectives operates like a game of Chinese whispers: concepts inevitably change their content and acquire new meanings in the process of communication itself. When employing Fleck's theory to trace the emergence of new ideas and thought styles it has to be borne in mind that some changes simply cannot be pinpointed to specific times, places and individuals. The social nature of cognition and communication entails that such changes are to some extent authorless. In *Genesis and Development of a Scientific Fact* Fleck suggests that the Wasserman reaction emerged from just such authorless contributions (Fleck 1935a [1979], 68-69).

This thesis treats the circulation of ideas and communication between thought collectives are fundamental components of social and cultural change, so examples of these processes are identified and explored throughout this thesis. However, some key examples are addressed. The first is the concept and practice of philosophy itself, which was transmitted from Athens (5th/4th century BC) to Rome (1st century BC)—a translation of concepts and practices from one imperial project to another—through Cicero's modification of the Socratic shift to practical moral philosophy which maintained the suppression of the sophists but repositioned rhetoric as a key practice of philosophy (see 4.1). The second is Shaftesbury's concept of 'self-formation', which was developed in the English individualist philosophy of politeness and transmitted to the philosophy faculties at German universities, where 'forming' and 'formation' were translated as '*bilden*' and '*Bildung'* and redeployed as part of a more collectivist or state-oriented approach to self-formation, that is, as fostered by educational institutions (see Chapter 5). Both these examples illustrate firstly how transmitted concepts are themselves transformed in the process of their transmission to a new cultural context, and secondly how such transformed-transmitted concepts can trigger cultural change and movements when they are released into the new context.

3.5 Supplementing Fleck's Concepts

3.5.1 Comparative Epistemology

Fleck's approach to *science* is descriptive: it explains how science is conducted, revealing and emphasizing the collective, contingent and anonymous nature of scientific development. Yet, at the same time, Fleck's approach to *epistemology* is normative; he argues that it should become a *comparative science*:

> If epistemology is meant to be a science capable of development, useful and rich in a substantial way, it ought to broaden the range of its interests. It must not be limited to the study of the domains and stages of science which are officially recognized at the given moment, but, taking into account the variety of thought-styles and the multiplicity of thought-collectives, it must become a *comparative science*. Likewise, it ought to take into account the developmental moment and, while including the embryonic stages of cognition, it should aim at the research methods of unclear, wavering and indistinct cognition. It must take into account fundamentally and in detail the *social nature of thinking and cognition*.
>
> Consequently it ought to include *psychological, sociological and historical methods*. […] *Epistemology thus understood is a science of thought-styles*. (Fleck 1936, 97-98, emphasis in the original)

Though he does not explicitly describe them as such, Fleck's genealogy of conceptions of syphilis in *Genesis and Development of a Scientific Fact,* his analysis of the life-fire proto-idea in *The Problem of Epistemology*, and his accounts of the Vesalian Revolution in *The Crisis of Reality* and *Scientific Observation and Perception in General*, can all be viewed as examples of the comparative epistemology he advocates.

The method employed in these accounts is predominantly based on the analysis of passages from source texts, applying the insights from Durkheimian sociology and Machist psychology within Fleck's own interactionist epistemology. This analysis is conducted with the reflexive awareness that the researcher's own thought style inevitably intrudes on the investigation of these 'alien' thought styles. Fleck acknowledges that there is no "absolute criterion of judgment" or "chronologically independent criterion" (1935a [1979], 25). In other words, since the researcher belongs to specialized and general thought collectives, there is no privileged, neutral position from which the science of comparative epistemology can be conducted. Thus any application of Fleck's concepts that would attempt to present an objective, neutral account of how changes in thought styles are involved in cultural change would be doomed to failure at the outset. The analysis of thought styles has to be conducted with the awareness that such analysis is necessarily and inevitably situated, limited and provisional.

However, these limitations by no means invalidate such research. Fleck's theory of cognition boils down to interaction and communication, and the study of thought styles can be conceived as an interactive and communicative practice, rather than as an attempt to adopt a privileged position from which thought collectives and styles can be represented objectively. Fleck's model of scientific cognition accounts for how scientists interact with *natural* phenomena (e.g. bacteria), but the model also applies to the cognition of cultural phenomena: the researcher of historical thought styles (the cognizer) interacts with the content communicated by temporally remote collectives (the cognized) through the training and conceptual lenses provided by culture (the existing fund of knowledge). The interaction with source texts, as well as with the interpretations, traditions and scholarship that have accumulated on top of them, can be tackled with varying degrees of sensitivity: ranging from maximalist appropriations, where the passive elements communicated by the cognized are seized to support the agenda of the cognizer (e.g. Hegel's requisitioning of history and the history of philosophy), to more reflexive analysis which, in a sense, attempts the impossible, in seeking to allow passive elements to 'speak for themselves' as much as possible (e.g. Schmidt's return to essays written by eighteenth-century German *Aufklärer* (1996)); or which problematizes passive elements, leading to recontextualizations, revisions and reframings (e.g. Derrida's interaction with the *pharmakon* in Plato's *Phaedrus* (1972 [1981]), which teases out suppressed elements and allows them to (be used to) reveal and unravel the network of hierarchized binaries that structure the post-Platonic fund of knowledge).

This study attempts to engage in reflexive critique, with a focus on the extratextual determinants of thought styles as factors that deliver shocks, cause intellectual unrest and contribute to cultural change. From this perspective, Derrida's deconstruction of Plato's *pharmakon* and the speech/writing binary can be fully accepted—but the focus then shifts to the social and cultural factors which a led to and motivated the production of Plato's texts, and which, crucially, are conceived as being embedded within them. Thus *philosophia* is treated as an emergent thought style developed and (textually) transmitted by an Athenian thought collective; one that defined and positioned itself in relation to other thought collectives, that engaged in and advocated certain social practices and forms of cultural production while attacking and ostracizing others; and that successfully transmitted its practices and ideas across empires and centuries.

Information about such relations and practices, as well as modes of production, distribution and consumption, is obviously reconstructed and conveyed through texts, and texts are the basic elements cognized in the study of thought styles, either as 'primary source texts'

or 'secondary literature'[17], but texts also refer to and are shaped by their contexts—the external factors that determine and produce them, and which can thus be construed as indirectly cognized elements. The Platonic practice of distinguishing between and evaluating modes of cultural production (e.g. poetry in *Republic*) and social practices (e.g. sophistry in *The Sophist*) is a textual practice that had far-reaching repercussions both in the field of cultural production, e.g. the suppression of sophist knowledge, and in social practices, e.g. the persistent bias towards theory in institutionalized education.

As the previous section (3.4.2) on intellectual unrest and Vesalius sought to demonstrate, Fleck's concepts of intellectual unrest, the circulation of ideas between thought collectives etc., are tools that allow provisional conclusions to be drawn about the extratextual determinants of thought styles. Fleck's epistemology requires sensitivity to the passive and active elements of cognition involved in the construction of historical accounts. Thus phenomena which can be identified as registering non-arbitrary, passive elements—e.g. examples of phonemic representation in ancient Greece, examples of Roman translations of Greek medical and philosophical texts, the combination of movable type and woodcut techniques in European books on anatomy, etc. are combined with active elements determined by the existing fund of knowledge—e.g. the conventions of dating and naming; reconstructions of circumstances, events, networks and relationships; the interpretative layer of evaluations, references, refutations, polemics, etc.

The study of thought styles often overlaps with other modes of investigation that seek to account for the external determinants of thought and texts, such as Marx's account of ideology, and Foucauldian and post-Foucauldian discourse analysis. The next sections indicate some differences between thought styles and ideologies, and between thought styles and discourses. The next sections also indicate how the Fleck's comparative epistemology can be supplemented by insights and tools from these modes of investigation, as part of a provisional methodology for the study of cultural change.

3.5.2 Ideology

Incompatible Models

Previous sections suggested that the classic Marxian identification of the economic foundation as the sole or primary source of change in the superstructure underestimates the capacity of

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[17] The distinction between primary source texts and secondary literature is obviously not clear cut or stable, for example the texts of doxographic traditions, or Roman commentaries on Greek philosophy, are both secondary and primary source texts.

ideas to trigger cultural change (1.2.1), and that when applied to certain historical periods Marx and Engels' concept of class conflict as a dynamic of change has weaker explanatory power than other research tools, such as those focused on the innovations introduced as a result of commercial networks or inter-generational antagonism (3.4.2). This section will argue that the Marxist concept of ideology, while problematic, provides useful explanatory power when cautiously applied to the functions of certain thought styles.

The various conceptions of ideology presented in, hinted at, and extracted from, the writings of Marx and Engels, and Marx's solo writings, have been the subject of extensive discussion in many traditions and schools, involving the contributions of such disparate thinkers as Weber, Lenin, Gramsci, Althusser, Laclau, G.A. Cohen, Rosen, and Žižek—to name but a few, and the intricacies of these disputes lay far beyond the scope of the present work. The aim here is merely to isolate conceptual components that are incompatible with Fleck's theory, and then to identify a concept of ideology indebted to Marx and Engels which can do some useful work when considering specific thought collectives and styles in certain historical circumstances.

As has been made clear, Fleck's theory is incompatible with any theoretical framework that insists *on the opposition between false ideology and scientific truth*, and that maintains reality can be accessed directly through perception and experience as soon as the chimeras of ideology have been dispensed with. Though this distinction has been thoroughly complicated and dismissed as part and parcel of a "worn out line of argumentation" by Žižek (2012), it would seem undeniable that it is strongly articulated in Marx and Engels' writing and by self-declared Marxists such as Lenin and Althusser.

The account of ideology as "wrong ideas", as false, distorted and misleading conceptions of real social relations, which can be extracted from Marx and Engels' writings, chiefly *The German Ideology* (1975, 23, 59-60), is grounded in the assumption that "real, positive science" has access to reality: to real premises, real men, empirically perceptible processes, and real knowledge (1975, 36-37). Even if Marx dropped this straightforward conception of ideology in his later writings, his analyses are consistently structured by the true/false dichotomy, and are driven by a lifelong attempt to expose secrets, false ideas, mystification, apparitions, spectres—from his early criticisms of "the mystificatory side of the Hegelian dialectic" (Marx 1873 [1990], 103), right through to *Das Kapital*'s analysis of "the mystical character of the commodity form" (Marx 1867 [1990], 164). In Michael Rosen's reading of *Das Kapital*, the true/false dichotomy has an ontological status: Capital is the

deceptive, false phenomenal subject that conceals the underlying structure of the true ontological subject, i.e. collective labour (Rosen and Wolff 1996, 217-222).

This framework is maintained by later exemplars of Marxist thought. For example, it is reflected in Lenin's 1909 attack on Bogdanov's Machist revision of Marxism, which rejected Mach's 'sensationalist' epistemology and insisted, firstly, that objective truth is accessible through experience: "Matter is a philosophical category denoting the objective reality which is given to man by his sensations, and which is copied, photographed and reflected by our sensations, while existing independently of them"; and, secondly, that science is distinguished from other ideologies due to its privileged access to truth: "every ideology is historically conditional, but it is unconditionally true that to every scientific ideology (as distinct, for instance, from religious ideology) there corresponds an objective truth, absolute nature" (1909 [2010], 122-131, 136).

Even in the wake of Kuhn's critique of science and the French post-structuralist reflexive critiques of Western knowledge, the claims to privileged access resurfaced in Althusser's classification of non-Marxist social and human sciences as "semi-sciences" or "pseudo-sciences", due to the influence of bourgeois ideology, and his assertion that Marx's scientific concepts provided the basis for a "a true scientific theory of history" (Althusser 1995 [2014], 18).

It could be argued that, despite all the Lacanian twists and turns, it is also ultimately detectable in Žižek's rejection of "historicist relativism" which "suspends the inherent cognitive value of the term 'ideology' and makes it into a mere expression of social circumstances" (Žižek 2012, 6). For Žižek, the cognitive value of the term 'ideology' seems to be that it testifies to "the 'repressed' real of antagonism": social reality is constituted through the primordial repression of social antagonism, i.e. class struggle (Žižek 2012, 16-18). This takes us back to the catastrophe of *The German Ideology*, to the idea that ideology emerged with the division of labour and is thus inseparable from class conflict (Marx Engels 1975). Žižek abandons the representationalist framework which claims to dispel the myths of bourgeois ideology to access reality and represent it (scientifically) as it truly is, and replaces it with a psychological framework which continues to posit the class struggle as ontologically fundamental: social reality is constituted by the primordial and continual repression of this antagonism—which is expressed in ideas, externalized in the Ideological State Apparatuses, and woven into the techno-economic fabric of everyday life.

Turning to Fleck's theory, the first point to make is that his framework does not allow ideas from the field of medicine to be straightforwardly classed as false or inaccurate, hence

the same would have to apply to the ideas and claims of political economy, dialectical materialism, history, economics, etc. (in Fleck's conception, all science is social, so describing the Marxian fields of investigation as 'social sciences' is somewhat redundant). Let us recall that Fleck firmly rejected the notion that past explanations of syphilis (e.g. the concept of carnal scourge) "can be simply declared wrong" (1935a [1979], 8). From the time of first written accounts of 'the French disease' in the late fifteenth century, all concepts of syphilis were based on observation, and some on experiment, so they cannot be classed as 'non-scientific' in any straightforward sense. From Fleck's perspective, the medicine of his time had not arrived at final, objective truth with its concept of a bacterial disease entity: by 1935 European medical thought collectives had constructed active elements, such as the Wassermann test, to cognize the entity *treponema pallidum*, through interaction with the non-arbitrary relations detected due to the thought collective's adoption of certain concepts, techniques, tests, apparatus (distinguishing symptoms, disease progression, microscopic measurements, observed reaction with the cardiolipin antigen) (1935a [1979], 53-81). Fleck's theory implies that the disease entity that was described in 1905 is not the same entity that was being described in 1935, since the interaction between the cognizer and the cognized had changed, as a result of developments in the existing fund of knowledge. In a similar vein to Mach, whose epistemology treats 'things' as abstractions imposed on the flux of sensations (elements), and rejects the 'thing-in-itself' as a pernicious metaphysical concept and projection, Fleck's epistemology treats disease entities as the result of the interaction between a thought collective and passive elements: there is no 'disease entity in-itself' that can be isolated from the interaction; there are just passive elements 'waiting to be discovered' through active constructions that allow further interaction (e.g. the genome sequencing of *treponema pallidum*, the discovery of further subspecies). This process of refinement and discovery cannot be conceived of as getting closer to absolute or objective truth, since each new conceptualization and technique leads the thought collective down a certain path, when a multitude of alternative paths could have been taken, each of which would have led to other interactions with other passive elements and alternative cutting-edge conceptions of the disease entity (Fleck 1936 [1986], 93-94), and perhaps to more effective treatments. As Mach highlighted, each solution arrived at by a set of conventions merely defines the next set of problems to be solved (1896 [1900]).

If Fleck's theory is applied to the Marxist theoretical tradition, the cognizers drew on the existing fund of knowledge to actively develop and construct concepts (productive forces, modes of production, feudalism, capitalism, the bourgeoisie, the proletariat, class struggle, ideology, etc.) in their interaction with the cognized (various social organizations and

knowledge concerning them). Here, the concepts of 'social class' is an abstract category applied to the flux of passive elements; it cannot be isolated from the interaction between the cognizer and the cognized, and any claims to have objective knowledge of 'the capitalist class', 'proletariat' or 'the class struggle' forget that these are tools drawn from and applied in interactions, treating them as entities that are ontologically independent of cognition. Lenin's criticism of Mach explicitly denies this interactionist component, with the image of cognition as photography, where human sensation and the human mind passively reflect what is given out there, i.e. a world of objects great and small, including macro-objects like social classes. The persistent Marxist focus on the class struggle—a conceptual tool constructed to understand the organization of certain European societies in the mid-nineteenth century—into the twenty-first century, as seen in Žižek's text, is an example of Mach's "pernicious error": it is a projected metaphysical concept that prevents or hinders the exploration of other phenomena, e.g. other forms of antagonism, other concepts for investigating social formations and organization, other conceptions of productive forces that focus on collaboration and competition (e.g. commercial networks).

From the perspective of Fleck's theory, both classical 'bourgeois' political economy and Marxist dialectical materialism have to be conceived as thought styles that developed conceptual tools in and for their interaction with the cognized. Each style 'discovered' certain aspects of social organization that were determined by their starting assumptions, the conventions adopted, and their modes of investigation. Marx's reflexive insight that the researcher's interaction with the phenomena is determined by their position in society opened up a new field of investigation—the consideration of how cognition is determined by social and economic factors. Thus the active elements of cognition that determine what aspects are considered in the study of political economy are determined in turn by *the context of the interaction*: the political economists' interaction with the cognized is determined by the social position (class) from which the analysis is conducted. However, while the conclusions of bourgeois political economy are necessarily the result of limited interaction conducted with certain tools, from a specific perspective, at a particular time and place, Fleck's theory resists the claims of dialectical materialism and insists Marxist investigations cannot claim a privileged position or access in their interaction with the cognized.

From the 'Fleckian' perspective advocated in this thesis, the Marxist project can be depicted as thought style that produced profound theoretical insights in its intense interaction with the cognized (i.e. industrializing *European* societies + other thought styles, e.g. Hegelian idealism, French political theory, British political economy, English socialism) between 1844

and 1873. However, it can also be described as a style that came to abandon creative interaction with the cognized, due to the psychological and methodological certainty provided by the metaphysical concept of the dialectic. Thus while the processes indicated by the concepts of productive forces, modes of production, and social relations continued to evolve, Marxist concepts, once abstracted from interaction, stopped evolving, became frozen, and were dogmatically applied by subsequent carriers of the thought style as ontological claims about the nature of objective reality based on privileged access to scientific truth.

The Functionalist Model

However, while Fleck's epistemology has to reject any conception of ideology which would class one thought collective's ideas as 'false' or 'wrong' purely due to the social position and economic interests of this collective, and, conversely, which would class another thought collective's ideas as 'true' or 'accurate' for the same reason, his theory is compatible with other conceptions of ideology, such as "the functionalist model" outlined by Rosen (1996, 213-16). Based on Cohen's analytical Marxist reading of the base/superstructure model presented in Marx's Preface to *Contribution to the Critique of Political Economy*, the functional interpretation of the theory of ideology posits that "certain beliefs (or other forms of consciousness) exist *just because* they maintain the social structure" Rosen Wolff 1996, 214).

It is necessary to unpack Rosen's adaptation of Cohen's reading of the key passage from Marx's preface (previously cited in 1.2.1):

> The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure. In studying such transformations it is always necessary to distinguish between the material transformation of the economic conditions of production, which can be determined with the precision of natural science, and the legal, political, religious, artistic or philosophic—in short, ideological forms in which men become conscious of this conflict and fight it out (Marx 1859 [1987], 263).

Cohen distinguishes between the superstructure and ideology: the former consists of institutions; the latter is a set of ideas. Cohen also maintains the classic distinction between science and ideology: science is a mental productive force, but ideology is unscientific mentation which can only influence the development of productive forces (Cohen 1978, 45-46). Rosen rejects this distinction and simply asserts that ideology is part of the superstructure: the superstructure "corresponds" to an economic base, thus the superstructure (Cohen) and

ideology (Rosen) can be interpreted as being "appropriate" to productive development. In other words, ideology exists because it has a function tied to the economic base (Rosen Wolff 1996, 213-14).

Thus, to extrapolate from this functionalist model, the set of ideas of the ruling class function—at least in part—to maintain its dominant position in society. If Marx's passage is read in a certain way, ideological forms can be viewed as expressions of underlying conflict in the economic base, and the superstructure can be viewed as a zone of conflict and contestation (*ideologischen Formen, worin sich die Menschen dieses Konflikts bewußt werden und ihn ausfechten* (Marx Engels 1971)). Thus it could be suggested that while the ideas of the ruling class function so as to maintain its domination (over the institutions of the superstructure and thus over the productive forces), the ideas of dominated classes function so as to resist and contest this domination.

This functional model also appears in reflections grounded in an entirely different (Lacanian-Althusserian) theoretical perspective, namely in Žižek's account of the legitimizing function of ideology which, crucially, also emphasizes the non-transparent, concealed nature of this function:

> We are within ideological space proper the moment this content – 'true' or 'false' (if true, so much the better for the ideological effect) -- is functional with regard to some relation of social domination ('power', 'exploitation') in an inherently non-transparent way: the very logic of legitimizing the relation of domination must remain concealed if it is to be effective (Žižek 2012, 6).

Thus, if the conception of ideology as false ideas (versus true science) is dispensed with, the following functional conception of ideology proves very useful when applying Fleck's theory to the study of cultural phenomena: the superstructure is a zone in which social groups articulate the relations, conflicts, and transformations occurring in the economic base and driven by productive forces; this articulation is characterized by varying degrees of consciousness and concealment, e.g. ranging from religious devotion and patriotic outpourings, through political beliefs and manifestos, to cynical propaganda, but to the extent that ideas and forms of cultural production 'fight it out [*und ihn ausfechten*]', i.e., are involved in a relation of social domination, they can be classed as ideologies, or at least as fulfilling an ideological function.

Therefore, with regard to the application of Fleck's theory in these investigations, a thought style can be identified as having an ideological component if the ideas, texts or

institutions through which the thought style is transmitted are involved in a relation of social domination—whether this relation is one of resistance or hegemony. The closest Fleck comes to this functional conception of ideology is when he describes Vesalius's innovations in anatomy as a 'struggle' or 'battle' (*Kampf*) in the face of tradition (1929 [1979], 54), and when, in a later text, he describes acceptance of Vesalius's approach as facilitated by the 'collective mood' of the period: one of 'intellectual unrest' and a 'dissimilarity of views' (1935b [1979], 75). Such 'struggle' and 'dissimilarity of views' can be described as ideological, or as having an ideological function, to the extent that they can be shown to be part of a collective struggle over the control of university institutions and knowledge production, and ultimately determined by conflicts caused by the development of productive forces and emerging modes of production.

An important consequence of adopting this functional model of ideology is that the application of Fleck's theory in the investigation of cultural phenomena can draw on classical Marxist accounts of specific historical periods, such as Brunt's *Social Conflicts in the Roman Republic* (1971), Perry Anderson's *Passages from Antiquity to Feudalism* (1974).[18] These provocative works of scholarship shed light on the external determinants of the ancient Athenian and Roman thought styles—that is, on how the slave mode of production allowed the development, transmission, appropriation and translation of *philosophia* (Brunt 1971, 20-41); how the concept of Greek liberty was indivisible from the systematic extraction of surplus value from slaves, and how the superstructural development of Roman property law was founded on the extensive use of slavery (Anderson 1974, 23, 66). Such accounts have to be treated as partial perspectives rather than as definitive 'objective history', bearing in mind the influence of the researcher's thought style on which external determinants receive attention and what *kind* of facts are reconstructed and posited as significant. The advantage of Fleck's theory is that it allows—or even requires—different accounts of the phenomena to be taken into consideration. Marxist accounts are valuable precisely because they attempt to shed light on the external determinants of thought, while the traditions of academic philosophy tend to remain securely ensconced *within philosophy*, that is, engaging in interpretative practices inside institutionalized layers of intertextuality.

3.5.3 Discourse, Hegemony and Cultural Production

Chapter 1 (1.2.3) highlighted that Foucault's distinction between discourse and non-discursive practices and events (Foucault 1969 [1989]) leads to problems when applied in relation to

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[18] For more recent scholarship supporting these classical analyses, see (Ando 2011).

cultural change. However, there are aspects of Foucault's conception of discourse and discursive practices that are relevant to the application of Fleck's theory, especially in the light of critiques of Foucauldian discourse made by Laclau and Mouffe (1985), and by Bourdieu 1993).

Foucault's Archaeology

Fleck's comparative epistemology justifies a comparison between Foucault's conception of discourse and Fleck's conception of thought styles. Considerable overlap can be identified, as well as dome key differences. In this comparison, the focus is restricted to Foucault's *L'archéologie du savoir/ The Archaeology of Knowledge* (1969) since this work contains Foucault's most extended and explicit account of discourse.

Foucault's fundamental aim in *The Archaeology of Knowledge* is "to describe the relations between statements" (1969 [1989], 34). Since there are regularities between statements, for example in terms of *what* they refer to and *how*, this project entails describing the relations between groups of statements. The first key point is that groups of statements do not refer to a constant, unchanging object: the "madness" referred to by groups of medical statements in the seventeenth and eighteenth centuries is not the same object as the "mental illness" referred to by the groups of statements enunciated by later "psychopathological discourses"—thus "we are not dealing with the same madmen" (1969 [1989], 35). Such objects emerge only in discourses, which are defined as "practices that systematically form the objects of which they speak" (1969 [1989], 54).

Hence the first similarity between thought styles and discourses is that both construct the objects of their knowledge and then *reconstruct* entirely different objects: "madness" and "mental illness" are inseparable from the discourses that formed them, just as "the carnal scourge" and "*treponema pallidum*" are inseparable from the thought styles that perceive and describe them, and the disease entities (diphtheria, syphilis) described in 1905-6 had become completely reconstructed by the 1930s, due to developments in the thought style.

At one point, Foucault actually hypothesizes that "style" is the characteristic feature that unites statements, forms a discourse, and determines perception:

> It seemed to me, for example, that from the nineteenth century, medical science was characterized not so much by its objects or concepts as by a certain *style*, a certain constant manner of statement. For the first time, medicine no longer consisted of a group of traditions, observations, and heterogeneous practices, but of a corpus of knowledge that

presupposed the same way of looking at things, the same division of the perceptual field,

the same analysis of the pathological fact in accordance with the visible space of the body,

the same system of transcribing what one perceived in what one said (same vocabulary,

same play of metaphor); in short, it seemed to me that medicine was organized as a series

of descriptive statements. (1969 [1989], 36, emphasis added)

However, he abandons this hypothesis due to the realization that clinical discourse cannot be reduced to the *form* of descriptive statements: it is also shaped by "institutional regulations" and "teaching models", and by a whole set of factors that determine the relation between the doctor and the patient: "masses of documentation, instruments of correlation, and techniques of analysis" (1969 [1989]). Foucault concludes that all the heterogensous statements that form a discourse (perceptual descriptions, instrument-mediated observations, laboratory procedures, statistical calculations, epidemiological or demographic observations etc.) are articulated through a group of rules, and are dispersed through a system of *secondary* relations. It is these rules or system, rather than the *style* of *form* of statements, that ultimately produces the regularities that allow a discursive formation to be identified (1969 [1989], 37-50).

This conception of discourse also allows Foucault to contextualize the knowing subject and open up broader field of determination than that indicated by Fleck's concept of the cognizer as a representative of a thought style. The system and rules of discursive practice create the positions from which subjects produce their discourse about objects. In other words, there is an educational, institutional and bureaucratic infrastructure involved in the systematic articulation of discursive statements: the position from which the questioning/ listening/ seeing/ observing subject (e.g. an epidemiologist, a doctor, a judge) enunciates his statements about the object (e.g. a bacteria, a patient, a criminal) is legitimized by "institutional sites" (e.g. the laboratory, the hospital, the court system) which are established by the system of relations immanent to a discursive practice (1969 [1989], 56-61). Foucault suggests that while subject positions, objects and institutional sites are constantly redefined and reorganized, a discursive practice maintains its stability and unity over time because "it makes constant use of this group of relations" (1969 [1989], 59). The references to the authorities (e.g. the law, the government) that recognize and use the bodies of knowledge produced by the discursive practice of medical knowledge (1969 [1989], 46) position this stable group of relations within a broader context, and hint at the régimes of power that would become the focus of Foucault's later investigations (1980). Thus the components that are encompassed by Fleck's active, socially-conditioned elements of cognition (e.g. the existing fund of knowledge, conventions, trained perception,

instruments, laboratory practices) can be repositioned in a far wider field of institutional, social and power relations.

However, when it comes to what is formed as an object of knowledge, Foucauldian discourse is significantly more restricted than Fleck's conception of the cognized. The project of *The Archaelogy of Knowledge* is explicitly restricted to a focus on discourse: "we shall remain, or try to remain, at the level of discourse itself" (1969 [1989], 53). As was mentioned in 1.2.3, Foucault's binary distinction between discursive practices and non-discursive practices leads to problems if his 1969 conception of discourse is applied to account for social and cultural change. While it has to be acknowledged that accounting for change was not the aim of Foucault's project, nevertheless the issue of change frequently arises in his text, for example in the accounts of changes in the discourse of Natural History, and of the appearance and disappearance of positivities, like the French Revolution (1969 [1989], 61-70, 193-95). The ostensible aim of Foucault's archaeology, that is, *to describe relations between statements*, which necessitates describing discourses and discursive practices, is rendered deeply problematic by the distinction between discourse and "prediscursive" entities, and between discursive and non-discursive practices—and by the refusal to conceptualize this "exterior", which is coupled with the insistence that "one remains within the dimension of discourse" (1969 [1989], 85).

On the one hand, Foucault acknowledges the exterior of discourse, and even interaction between discourse and its exterior: a discourse (e.g. the Analysis of Wealth) is said to perform a function "in a field of non-discursive practices" (e.g. the practices of emergent capitalism). (1969 [1989], 75). On the other hand, this exterior of discourse is also consistently characterized as a now inaccessible primordiality: as prediscursive experiences anterior to discourse, as the primal soil that is free from the tyranny of the text, as the ground or foundation of things. For some reason, in order to study a discursive practice it is necessary "to suppress the stage of 'things themselves'" (1969 [1989], 52-53): the exterior is temporalized as anterior, *pre*-textual, with the implicit suggestion that attempts to access it are driven by pre-Kantian metaphysical prejudice. In other words, Foucault both allows that discursive practices interact with the exteriority of non-discursive practices and suppresses investigation of the interaction between a discourse and its referent, i.e. what is formed as the object of discourse. Foucault does not deny the existence of the referent, thus subjects whose positions and perceptions are defined and determined by a discourse still see 'something', even if the apprehension of this something is inseparable from the textual codings and entanglements of a discourse. Foucauldian archaeology opts to focus on the interaction between the statements and concepts of a discourse,

and between one discourse and others, rather than on the interaction between a discourse and its non-discursive exterior. Thus the concepts and methods of the Physiocrats are compared with those of the Utilitarists, but not considered in terms of their relation to the economic base, modes of production, etc. (1969 [1989], 82).

A consequence of this strategy is that the analysis tends to become descriptive rather than explanatory. For example, Foucault describes how the discourse of Natural History "altered" in the seventeenth and eighteenth centuries: existing concepts (genus, species, signs) came to be used in new ways, and new concepts were invented (e.g. structure), but most importantly:

> … what was altered in the seventeenth century, and was to govern the appearance and recurrence of concepts, for the whole of Natural History, was the general arrangement of the statements, their successive arrangement in particular wholes; it was the way in which one wrote down what one observed and, by means of a series of statements, recreated a perceptual process; it was the relation and interplay of subordinations between describing, articulating into distinctive features, characterizing, and classifying; it was the reciprocal position of particular observations and general principles; it was the system of dependence between what one learnt, what one saw, what one deduced, what one accepted as probable, and what one postulated. In the seventeenth and eighteenth centuries, Natural History was not simply a form of knowledge that gave a new definition to concepts like 'genus' or 'character', and which introduced new concepts like that of 'natural classification' or 'mammal'; above all, it was a set of rules for arranging statements in series, an obligatory set of schemata of dependence, of order, and of successions, in which the recurrent elements that may have value as concepts were distributed. (Foucault 1969 [1989], 63)

No explanation is offered as to why such a fundamental transformation of this discourse and its discursive practices occurred. The description is merely extended to the characteristics of the enunciative field in which the discourse is articulated, thus for instance "a field of concomitance" is identified: Natural History in the period of Linnaeus is defined by its relations with other concomitant discourses ("cosmology, the history of the earth, philosophy, theology, scripture and biblical exegesis, mathematics" (1969 [1989], 64).

Fleck's theory posits that such concomitance is itself—as the circulation of ideas between thought styles (Fleck 1936 [1986], 87)—is a major driver of change, and application of his concepts to the fundamental alteration of Natural History identified by Foucault would have to track the transmission, reception and transformation of concepts as they circulated

between thought collectives in this period. More fundamentally, though, Fleck's epistemology requires consideration of how the new system and set of rules described by Foucault changed the *interaction* between the cognizer and the cognized. What new objects were formed as a result of this altered discourse? What new value was extracted when subjects enunciated statements from within this new system? How did the positions and roles functions of botanists and naturalists change as a result of the natural world being treated as an object of systematic classification? Or, in more explicitly Fleckian terms: why did various thought collectives in Sweden, Britain and Holland—e.g. Linnaeus and 'his apostles' at Uppsala university, the 'scientific explorers' on Captain Cook's colonizing voyages, military-commercial enterprises like the Dutch East India Company, the English landed aristocrats who established herbariums, nurseries and botanical gardens—all become involved in the costly practices of seeking out, collecting, describing, classifying, transplanting and cultivating botanical specimens in the mid-18th century? What were the determinants that led Linnaeus to abandon the conventions of polynomial nomenclature and create a new system of binomial nomenclature in *Species Plantarum* (1753)? Why did this thought style emerge in Northern Europe at this particular time? Why was its so readily embraced, for example, by the British Royal Society in the 1760s?

A general answer to all these questions could begin by gesturing to a fundamental change occurring in the practices and thought styles of certain European collectives, predominantly Protestant in origin and orientation. New attitudes and modes of interaction are reflected in Bacon's exhortations for natural philosophers to *penetrate*, *investigate*, *interpret* and *disclose* 'nature' for the sake of man's utility and dominion (1620 [2000]), and in the utilitarian approach to nature expressed in the English, Dutch, German and Swedish physico-theology that proliferated between 1650 and 1750 (Blair von Greyerz 2020). Some cursory research allows some more specific answers to these questions to be briefly indicated.

Thus, for example, Lisbet Koerner argues that Linnaeus's taxonomic innovations in natural history—a field of investigation which would later be refocused into the distinct fields of geography, anthropology, geology, zoology and botany—were inseparable from his views and projects associated with political economy, such as sending his students across the world in search of specimens that he thought could be brought back and cultivated in Sweden (e.g. tea), or his attempting to find Swedish replacements for imported commodities (e.g. coffee). Linnaeus's thought style can be identified as combining physico-theological assumptions, which viewed nature as "a benign—indeed, prelapsarian—superorganism, created by God for humankind's use" Koerner 1999, 118), with a cameralist economic theory which sought to ensure the self-sufficiency of the Swedish state. The Linnaean apostles were sent out on a

national mission, as appropriators of specimens and technologies that could be put to use at home, rather than agents of colonial conquest. Linnaeus's obsession with bringing back tea trees from Guangzhou and establishing tea plantations and in Sweden was driven by his dire assessment of the European imperial practice of exchanging Latin American silver for dried Chinese tea leaves. In Linnaeus's view, the intrinsic value of silver was wasted in its export to "the barbaric countries of the distant East Indies" (Koerner 1999, 136). Thus Linnaeus's cameralist perspective led him to condemn the importation of foreign luxury goods, like coffee and sugar, as wasteful, when resources could be devoted to developing local herding and farming, and local alternatives. Linnaeus's scientific texts and sermons provide evidence that his detailed study of regional flora and fauna was in part motivated by the desire to save peasants from the famines that regularly decimated the Scandinavian countryside (Koerner 1999, 131). Knowledge—of edible wild flora, of crops and the reasons for their failure, of which plants could become acclimatized to the Swedish environment—was thus produced through and for interaction with 'nature', and it was inextricably bound up with attitudes to imports and national self-sufficiency.

As Fleck's theory predicts, when Linnaeus's system was communicated to another thought collective, it triggered far-reaching changes in practices. Correspondence and Royal Society papers allow certain facts to be reconstructed. Linnaeus's new taxonomic system was transmitted to England via Daniel Solander, "a qualified young scholar from Uppsala" who was sent "to England to promote the study of natural history" (Banks and Rauschenberg 1964). This Linnaean apostle soon mastered the English language, obtained a position at the British Museum and became a member of the Royal Society in 1764. Through his friendship with Sir Joseph Banks, an aristocratic landowner, naturalist, botanist, and later President of the Royal Society, Solander was taken as Banks's assistant on Captain Cook's first circumnavigation (1768-71). In effect, the Linnaean thought style was stripped of its Swedish nationalist-cameralism and was repurposed as a tool of colonialist military-scientific expansion. Cook's voyage, ostensibly to observe the transit of Venus from Tahiti, was a joint Royal Navy and Royal Society expedition funded by the British state with the secret objective of acquiring new territories (Fara 2003, 77). Throughout the voyage, Banks and Solander were relentless in the application of the Linnaean knowledge gathering system:

> At every opportunity, the naturalists trawled for fish, retrieved birds and insects caught in
> the ship's rigging, and hunted for plants and animals when they went on shore. The
> naturalists settled into a routine which they maintained throughout the voyage – Banks

and Solander inspected the new specimen, Parkinson or one of the assistants drew it, and then its new name and details were added to their Linnaean textbooks. Banks brought back around 3,000 dried plants and almost 1,000 original drawings, many of them made at sea from specimens piled up beneath damp cloths to keep them fresh. (Fara 2003, 79-80)

Focusing on personalities, biographical details and first-hand accounts—elements which Foucault's abstract depictions of discourse in *The Archaeology of Knowledge* studiously avoid—allows the interaction between the discourse of Natural History and its objects to be reconstructed. The sub-discourse of Linnaean botany, when applied as a system of knowledge production by the British colonizing machine, interacted with both 'Nature' and indigenous knowledge in very specific ways. As Cook's journal entry of Thursday 30 November 1769 testifies, in New Zealand the botanists gained access to their objects of study literally at gunpoint:

> I went with the Pinnace and yawl Man'd and Arm'd and landed upon the Island accompan'd by Mr Banks and Dr Solander. We had scarce landed before all the Canoes left the Ship and landed at different parts of the Island and before we could well look about us we were surrounded by 2 or 3 hundred people, and notwithstanding that they were all arm'd they came upon us in such a confused Stragleing manner that we hardly suspected that the[y] meant us any harm, but in this we were very soon undeceaved for upon our indeavouring to draw a line on the sand between us and them they set up the war dance and immidiatly some of them attempted to seize the two Boats; being disapointed in this they next attempted to break in upon us upon which I fired a Musquet load[ed] with small shott at one of the forwardest of them and Mr Banks and 2 of the men fired immidiatly after; this made them retire back a little; but in less than a minute one of the Chiefs rallied them again, Dr Solander seeing this gave him a peppering with small shott which sent him off and made them retire a second time; they attempted to rally several times after and only seem'd to want some one of resolution to head them; but they were at last intirely dispersed by the Ship fire[ing] a few shott over their heads and a Musquet now and than from us. (Cook 2003, 94-95)

Linnaean binomial nomenclature was explicitly used to appropriate and overwrite indigenous knowledge:

> Although the Maori called their plant *Harakeke*, Banks gave it a Linnaean label – *Phormium tenax* (he even christened one variety *Phormium cookii*). He gloated that 'so

usefull a plant would doubtless be a great acquisition to England', and Parkinson carefully drew flax for the book they planned to publish together on their return. (Fara 2003, 89)

Thus the discourse of Natural History was not simply "a form of knowledge" or "a set of rules for arranging statements in series" (Foucault 1969 [1989], 63): it was a way of interacting with 'the exterior' constituted by the natural world and other cultures, and was embodied in practices as diverse as firing muskets at indigenous peoples, disseminating knowledge through books and scientific societies, or tending exotic cultivars in a botanical garden in London.

To sum up, there is considerable overlap between Foucault's conception of discourse (1969) and Fleck's thought styles. On the one hand, Foucault's positioning of the subject within systems and groups of relations, and his identification of institutional sites as positions from which statements are enunciated, greatly expands the range and scope of the determinants involved in Fleck's active elements of cognition. On the other hand, Fleck's epistemology and theory of thought styles requires us to focus on the interactional functions of discourse, and thus on how specific groups of human beings use discourse (systems of knowledge production) to interact with the exterior—Nature, the Other, in their material and social relations.[19] While the theory of discourse outlined in *The Archaeology of Knowledge* explicitly suppresses investigation of such interaction in favour of focusing on the rules of anonymous discourse and inter-discursive relations, Fleck's theory of thought styles provides an epistemological framework that allows us to consider how individuals interact with their natural and social environments through the lenses and tools of their thought styles.

Laclau & Mouffe's Articulatory Practices

There are two components of Laclau and Mouffe's discourse theory that have particular relevance for the application of Fleck's concepts to the phenomena of cultural change: a) their

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[19] At this point it is necessary to signal Edward W. Said's complex critique of Foucault's conception of discourse, detailed consideration of which lies beyond the scope of this work. One key point to highlight is that Said's *Orientalism* considers Orientalist discourse not only in terms of how it constructed "the Other", but also in terms of how this Other was treated: "[Orientalism] *is*, rather than expresses, a certain *will* or *intention* to understand, in some cases to control, manipulate, even to incorporate, what is a manifestly different (or alternative and novel) world; it is, above all, a discourse that is by no means in direct, corresponding relationship with political power in the raw, but rather is produced and exists in an uneven exchange with various kinds of power […]" (2003, 12, italics in original). This uneven exchange with various kinds of power can be read as taking place between the various powers internal to the discourse (political, intellectual, moral), but also in the relationship (or perceived relationship) between the discourse and the culture that is investigated, classified and appropriated, e.g. Napoleon's Egyptian expedition: "the very model of a truly scientific appropriation of one culture by another" (Said 2003, 42). Thus it could be argued that, with the concept of the Other and the uneven exchange between powers, Said brings the missing element of interaction into Foucauldian discourse.

rejection of Foucault's distinction between discursive and non-discursive practices, which leads to their focus on articulatory practices; and b) their conception of the relational and differential character of all social identity, which entails that groups are constituted through antagonistic articulations. Both of these contributions to discourse theory are ultimately grounded in Laclau and Mouffe's rejection of the orthodox Marxist base/superstructure distinction.

a) The Rejection of Non-discursive Practices

For Laclau and Mouffe, Foucault's insistence on the distinction between discursive and non-discursive practices stems from the classical dichotomy between thought and matter, which also underpins the orthodox Marxist distinction between the economic base and the cultural superstructure. Whereas orthodox Marxism is depicted as positing an objective material world existing outside the superstructural world of thought, Foucault's discourse is characterized as positing a world of *material* non-discursive complexes and practices that exist anterior to and exterior to the world of *mental* or *linguistic* discursive practices and formations. Laclau and Mouffe collapse these distinctions by affirming that every discursive structure has a *material* character (1985, 106-08). Thus Foucault's non-discursive field, consisting of "institutions, political events, economic practices and processes" (Foucault 1969 [1989], 179-80), becomes reconceived as a material *field of discursivity* that is continually produced by antagonistic articulatory practices. All social practices, regardless of whether they are defined as linguistic or behavioural, are involved in "the social production of meaning, which is structured under the form of discursive totalities" (Laclau Mouffe 1985, 107).

Thus, to extrapolate, such diverse practices as ploughing a field, exploiting slave labour, exchanging coins for commodities, increasing the price of a commodity, establishing a university, dissecting a corpse in an anatomy theatre, firing a musket at indigenous people, building a factory, identifying disease entities with the help of a microscope, etc. are all practices that have meaning by virtue of discourse, and can thus be defined as discursive practices. Crucially, this model of discourse rejects "the thesis that the productive forces are neutral" (Laclau Mouffe 1985, 80). In this framework, the blind productive forces that drove Marxist history are reconceived as social practices that organized the exploitation of natural and labour resources through structured systems of social relations that were always already immanently saturated with meaning. Hunter-gatherer practices involve the designation of roles and positions through an organized system of meaning. When agriculture was adopted as a mode of production, the new behavioural practices produced both food and meaning. Once the

model of one-directional determination is abandoned, wherein 'the economy' always determines 'society' in the last instance, and when meaning is freed from the confines of explicit linguistic articulation, it becomes possible to posit multi-directional determination and feedback loops, whereby 'the social' produces meaning and meaning produces 'the social'.

Thus to extrapolate further, the slave modes of production that emerged in ancient Greece and Rome can be identified as discursive totalities that assigned relational functions, statuses and identities to human beings through hegemonic articulatory practices: in ancient Athens, a human being was treated as a slave, a metic, a foreigner, a citizen or a woman by the articulatory practices of the dominant discourse: systems of commodity exchange, law, religion, the institutions of the *polis* etc. Instead of the economic base being conceived as a one-directional determinant of the superstructure, wherein meaning is always assigned later, as a result of reflection in thought and expression in language, Laclau and Mouffe's concept of 'the social' asserts that meaning is distributed throughout social processes and relations, including economic practices. In other words, "the practice of articulation, as fixation/dislocation of a system of differences, cannot consist of purely linguistic phenomena; but must instead pierce the entire material density of the multifarious institutions, rituals and practices through which a discursive formation is structured" (Laclau Mouffe 1985, 109). The exchange of slaves as commodities in Ancient Greece and Rome required a system of differential meanings to be operating in social practices prior to any explicit codification in law—and Laclau and Mouffe's conception of articulatory practices encompasses both of these economic and linguistic practices.

b) Discourse & Group formation

Laclau and Mouffe's rejection of the distinction between the economic base and the superstructure also has significant consequences for their conception of social groups, and it is this aspect of their theory of discourse that has particular relevance for this attempt to apply an updated version of Fleck's theory. Since for Laclau and Mouffe "every object is constituted as an object of discourse", it follows that social classes are constituted as objects of discourse.

A soft constructionist interpretation of Laclau and Mouffe's position suggests that "both social and physical objects exist, but our access to them is always mediated by systems of meaning in the form of discourses" (Jorgensen Phillips 2002, 35). There is some unfortunate ambiguity in Laclau and Mouffe's clarification of the ontological status of objects 1985, 108). They do not explicitly acknowledge the existence of physical or social "objects" independent

of discourse or thought; they merely assert that "events" like an earthquake or falling brick "exist". These *events* can be constructed as different *objects*, such as "natural phenomena" or "expressions of the wrath of God", depending on how the discursive field is constructed. The conclusion comes in the form of a complex denial: "What is denied is not that such objects exist externally to thought, but the rather different assertion that they could constitute themselves as objects outside any discursive condition of emergence" (1985, 108). To maintain consistency, I suggest a harder constructionist interpretation is necessary here: there are no objects—physical or social—external to discourse. Objects constituted by discourse, such as social classes and categories, can be construed as having an empirical basis, or a basis in empirical reality (Laclau Mouffe 1985, 132), since they are constructed on the basis of events and regularities. However, given Laclau and Mouffe's conception of the social as a field of antagonism and surplus meaning, the concept of social class cannot exhaust, close or fix the groups and identities that emerge in this field.

For Marx, Engels, Kautsky and Lenin, the proletariat appeared to be a fact of experience: it was a class unity formed by the laws operating in the economic base. Hence, in the orthodox Marxist tradition, the working class assumed the status of an ontologically privileged agent, or even a transcendent subject. Laclau and Mouffe trace the unorthodox contributions of Luxemburg, Adler, and Gramsci, through which the proletariat came to be successively viewed as a symbolic unity, a discursively constituted subjectivity, and a set of collective wills that traversed social classes in their opposition to the hegemonic class. Laclau and Mouffe break from what they identify as Gramsci's lingering economic determinism, objectivism and essentialism (1985, 69) to assert that defining political subjects in terms of class is no longer necessary or useful in light of the "constant emergence of new forms of political subjectivity cutting across the categories of the social and economic structure" (1985, 13).

Since classes and groups are not objectively existing entities formed by the laws of economics, Laclau and Mouffe have to put forward an alternative mechanism that accounts for the existence of groups as discursive objects. The two key concepts brought into play are hegemony and antagonism: the field of discursivity is said to be an antagonistic terrain in which competing forces struggle for dominance or hegemony (Laclau Mouffe 1985, 136). Following Derrida, meaning and identity are defined differentially and relationally, thus a group is constituted by an articulatory practice that confronts other articulatory practices and defines itself antagonistically in relation to this exterior. The interior of a hegemonic discourse is thus constructed through an articulatory practice that attempts the impossible: to seal itself off from

other practices, to construct stable subject positions and identities, to fill signifiers with fixed meaning, to arrest the flow of difference, to close the political space, to attain conclusive hegemony over other discourses (1985, 112-132).

A discourse achieves hegemony when its articulatory practices suppress alternative discourses and its meanings become naturalized: its subject positions are not questioned, since they have become part of 'basic common sense' (e.g. national identities). However, Laclau and Mouffe's Derridean position asserts that meaning is always overdetermined: there is no central, transcendental signified that stands outside the system of differences and fixes meaning once and for all; meaning is always deferred and defined by difference, and all identities are fundamentally unstable. Therefore, hegemony has to be continually maintained through articulatory practices (e.g. flags, monuments, rituals, history lessons, patriotic cultural production) that suppress competing discourses and alternative meanings. Laclau and Mouffe argue that sometimes the "precarious" and "contingent" nature of the identities constructed by the hegemonic discourse becomes apparent, and alternative subject positions become articulated in the field of discursivity.

As Marianne Jorgensen and Louise J. Phillips indicate, Eric Hobsbawm's traditional Marxist analysis of nationalist and class identification in Europe in the years before and during the First World War can be used to illustrate a historical moment when conflicting subject positions were articulated. Unfortunately, Jorgensen and Phillips focus exclusively on Hobsbawm's account of the run-up to the war, to suggest that "the national articulation prevailed" over workers' class-based identifications (Jorgensen Phillips 2002, 46). In fact, Hobsbawm only concludes that "Nationalism was victorious in the formerly independent nationalities of belligerent Europe", that is, in states like Britain and France. His account indicates that the issue of collective identification was far more complex in the regions of Central and Eastern Europe that were dominated by various forms of imperial rule (Hobsbawm 1991, 122-30).

Hobsbawm suggests that prior to 1914 identification with the nation state was a key part of the identities of the petty-bourgeoisie and lower middle classes—in both independent countries (Britain, France) and those under the yoke of imperialism (e.g. Ireland, Poland, Hungary). In contrast, European workers who identified with the new proletarian movements were "consciously and militantly *internationalist*, or at the very least non-nationalist" (Hobsbawm 1991, 123). Thus it caused consternation among the leaders of the socialist movement when working class men (Welsh miners, for example) eagerly signed up to fight for the British nation state against the working class men from the German nation state. Hobsbawm

argues that this is because the collective identifications were not mutually exclusive: people had several different attachments and loyalties, and could entertain the appeals of various movements and claims on their identity simultaneously:

> For long periods of time these different attachments would not make incompatible demands on a person, so that a man might have no problem about feeling himself to be the son of an Irishman, the husband of a German woman, a member of the mining community, a worker, a supporter of Barnsley Football Club, a Liberal, a Primitive Methodist, a Patriotic Englishman, possibly a Republican, and a supporter of the British empire.
>
> It was only when one of these loyalties conflicted directly with another or others that a problem of choosing between them arose. (Hobsbawm 1991, 123-24)

Hobsbawm suggests that the choices people made depended on complex and specific contexts: nationalism was victorious in independent states, thus British, French and German workers supported their national governments, while the workers and peasants in regions under the Habsburg, Tsarist and German empires, who, insofar as they adopted any identity beyond that of their town or village, might identify as Poles, Hungarians, Czechs, Slovaks, Slavs, Jews etc., tended to support movements which articulated overlapping national, social, ethnic and religious identities (e.g. Colonel Piłsudski's Polish Socialist Party).

When viewed from the perspective of Laclau and Mouffe's discourse theory, the years 1914-18 can be described as a period in which the hegemonic discourses of Empire and Nation were challenged by a multiplicity of discourses which articulated new subject positions through the reconstruction of suppressed national, social, religious, ethnic and political identifications. Thus, due to these resurgent discursive representations, by 1918 the 'citizens' of the collapsing Habsburg, Tsarist and German empires became able to identify themselves in completely new contexts as Polish Socialists, Czecho slovaks, Zionists, Bundists, Bolsheviks, Orthodox Slavs, etc. The subject positions dispersed by these new or resurgent discourses appealed to composite attachments and loyalties by constructing collective identities in opposition to both the hegemonic discourses of the collapsing empires and through demarcating other discursive enemies (Bundism vs. Zionism, Bolsheviks vs. Menshseviks, anti-Semitism). As Hobsbawm observes, while nationalism was victorious in the Allied nation states, in the defeated or semi-defeated states "collapse led to social revolution" (1991, 130). The collapse of hegemonic discourse and the emergence of new collective identities in 1917-18 provides a very clear example of how articulatory practices extend beyond linguistic representations and are embodied in the dynamic restructuring of social relations.

Laclau and Mouffe's own example focuses on the precarious nature of class identification in the second half of the twentieth century, particularly in the light of "struggles in the Third World" (1985, 13): when the identities of social agents were no longer *exclusively* constituted by relations of production, the agent's identification with a class was challenged by the possible adoption of other subject positions (Laclau Mouffe 1985, 58). Thus, a person could also identify with a nation, a gender, a generation, an ethnicity, a culture, a region, etc., and often these criss-crossing identifications come into conflict, due to the primary antagonisms that are constitutive of discourse.

In Mouffe's more explicitly Schmitt-inspired conception of 'the political', which draws on the latter's friend-enemy distinction, antagonism is assumed to be an 'ineradicable' dimension of social life: it "belongs to our ontological condition" (Mouffe 2005, 16). Thus discourses are necessarily grounded in this primary, ever-present antagonism and draw on the affective forces of the "passions" (Mouffe 2005, 24). Collective identifies are conceived as discursive constructs formed relationally through the creation of a 'we' defined in opposition to a 'they'; the positive construction of a 'we' is bound up with the negative identification and representation of enemies (Mouffe 2005, 1-15) (Dersley 2020).

c) The Relevance to Fleck's Theory

In terms of Fleck's theory, the first, obvious consequence of Laclau and Mouffe's conception of discourse is that Fleck's thought collectives have to be conceived as objects constituted by discourse. So, when Fleck asserts "As a research worker he is part of that community with which he works. […] As a member of a political party, a social class, a nation, or even a race, he belongs to other collectives" (Fleck 1935a [1979], 45), the general thought collectives of class, nation or race cannot be treated as entities that exist exterior to or independent of the productions of discourse. They have to be viewed as generalizations produced by discourses, which, while initially created as discontinuous categories to impose order on the flux and complexity of interaction with the social, have become remote from any referent based in sensation, through circulation processes, to the point that they have become the taken-for-granted stereotypes of common sense.

Then, if it is accepted that Fleck's thought collectives can be treated as objects constituted by articulatory practices, then the thought styles they carry have to be conceived as subject to the processes of discourse formation. Thus conceived, thought styles are constituted as structured discursive totalities by articulating a differential position in relation to other

thought styles, with which they interact antagonistically, while striving for hegemony. Thus a thought style is identifiable as *a style* because it distinguishes itself from other *styles*. This is particularly relevant when a new thought style emerges by modifying the prevailing thought style, e.g. the emergence of the Vesalian thought style from new Galenism (3.4.2).

Such modifications are proclaimed and treated as revolutions through the articulations that assert discontinuity in the discursive field. However, bearing in mind that a new thought style is bound to strive for hegemony in its field means that research has to be conducted with caution, i.e. with the awareness that the rhetorical layer of differential articulation masks fundamental continuities (e.g. Vesalius's loyalty to Galenic assumptions, as reflected in the maintenance of divisions, procedures etc.). As Laclau and Mouffe repeatedly point out, a final 'suture' is an impossibility: a discourse cannot completely cut itself out as a totality and closed space, its identity always contains elements of the other that it defines itself against (Laclau Mouffe 1985, 108-113). No matter how vehemently a thought style may insist on its originality and independence from its predecessors, such an articulation cannot escape the fundamental instability and interaction involved in the differential assertion of identity.

Fleck's concept of thought styles can be adapted to investigate this discursive instability and fluidity. In their Fleck-inspired investigation of 'research styles', Afeltowicz and Sojak steer the concept of style away from uses that give the researcher "a sense of ontological security" towards a mode of investigation that "does not require strict divisions and unambiguous criteria: a style is something fluid, something that merges with each other, goes from one into another, splits into new streams and constantly fluctuates" (2015, 30, author's own translation).

The second consequence of Laclau and Mouffe's theory of discourse is that more elements become methodologically accessible as external determinants of a thought style. While orthodox Marxism posits developments in productive forces and modes of production as primary, and intellectual labour as delayed and secondary, and while Foucauldian discourse theory posits non-discursive practices as the material-economic exterior of discourse, Laclau and Mouffe's conception of articulatory practices allows techno-economic developments to be conceived as partially determined by discourse, since these developments arise from processes which involve meaning systems and articulatory practices. Once we dispense with the model of one-directional determination imposed by the classic base/superstructure dichotomy and Foucauldian discursive/non-discursive distinction, a thought collective can be identified as triggering economic transformation and cultural change with the innovations of its thought style.

We can recall that one of the key characteristics of a thought style, as defined by Fleck, is the "technical and literary style characteristic of the given system of knowledge" (Fleck 1935a [1979], 99). Style can thus be presumed to extend far beyond the styles of writing used to communicate conclusions among the esoteric circle and to share knowledge with the exoteric community. The concept of 'technical style' can be stretched to encompass genres, textual formats, means of production, transmission and dissemination, and even the commercial and institutional infrastructure which supports and enables the communication of a thought style.

Thus, referring back to the intellectual unrest explored in 3.4.2, the commercial networks responsible for book production in Venice and Basel in the first half of the sixteenth century, with which Vesalius interacted intensively in the years 1538-1546, can be conceived of thought collectives whose articulatory practices—e.g. the messy business of producing books from paper and ink, experimentation with new printing technologies and formats, complex cross-border trade and communication between disparate social circles, marketing at book fairs and the creation of consumer demand, the adoption of deliberate strategies for dissemination of knowledge—both triggered and were triggered by a revolution in social relations. In other words, the thought style of this collective was involved in a kind of feedback loop whereby new cultural practices stimulated the development of new modes of cultural production, which in turn stimulated new cultural practices, and so on.

The centrality of hegemony and antagonism to Laclau and Mouffe's theory also leads to the conclusion that, while these commercial networks relied on complex cooperation and the reciprocities of trade, their articulatory practices were ultimately driven by antagonism, which could be framed as a conflict over knowledge production and dissemination waged between the hegemonic thought collectives and emergent thought collectives. Laclau and Mouffe's abandonment of the centrality of class struggle also allows the conflict between thought collectives (or discursive formations) to be characterized as multi-layered and multi-dimensional: economic, intergenerational, institutional, regional etc.

Bourdieu's Field of Cultural Production

Afeltowicz and Sojak have demonstrated that Fleck's conception of thought styles and Pierre Bourdieu's concept of habitus are compatible and complementary when applied in the reconstruction of historical phenomena (2015, 41-53). A detailed comparison of Fleck's social epistemology and Bourdieu's sociology of practices obviously lies beyond the scope of the present work. For the purposes of this thesis, I will merely draw on Bourdieu's concept of the

field of cultural production (1993) as a possible kind of environment in which Fleck's thought collectives can be positioned as operating.

With this restricted aim in mind, it is still necessary to consider the ontological status of Bourdieu's social classes and fields, since these entities can be viewed as crossing over with Fleck's thought collectives and socially-determined thought styles. In order to address these issues, brief consideration has to be given to both contemporaneous critiques of Bourdieu's theory—the charges of ambiguity, ambivalence and muddle (Ester 1983, 70), and of ontological and epistemological confusion (Jenkins 1992, 52-62), and the recent embrace of Bourdieu's concepts by proponents of cognitive externalism (Fogle Theiner 2018) and cognitive sociology (Lizardo 2019).

Bourdieu's concept of field denotes and probes the external environment in which the habitus of agents is situated. In opposition to intertextual approaches which treat culture as a system of interrelated, mutually referential texts and limit their analyses to the interior domain of symbolic representation, Bourdieu focuses on the practices that produce culture, and on the environment in which this production takes place. His concept of the field of cultural production is differentially defined in contrast to Foucault's conception of discourse, which Bourdieu characterizes as refusing "to relate works in any way to their social positions of production, i.e., to positions occupied within the field of cultural production" (Bourdieu 1993, 33). Thus, in opposition to Foucault's insistence that "one remains within the dimension of discourse" (Foucault 1969 [1989], 85), Bourdieu creates a model that describes and analyses the social environments in which discourses are produced, diffused and embedded. The field of cultural production is one such environment: works of art and literature, as well as the auxiliary infrastructure constituted by media reviews and scholarly discourse, are the products of social and cultural practices that agents engage in as they compete for cultural capital.

Culture is thus conceived as a space of struggle and contestation, a space structured by previous struggles and conflicts, which entails that the possible positions and the relations between them have been established in advance of an agent's actions in the field. So, when agents engage in practices in the field of cultural production, they take positions in the already established "spaces of possible", the space of position-takings [*prises de position*]. Historical reconstructions of the circumstances surrounding the production of cultural works tend to omit consideration of the network of relations that structure these positions; these relations are not mentioned in contemporary accounts, they are just "part of the self-evident givens of the situation" (Bourdieu 1993, 31). Bourdieu's model treats the elements that tend to be suppressed

in traditional intertextual accounts as crucial to understanding how texts and authors acquired their status and came to occupy their current positions.

One example of the effects of such suppression is the "consecration" of certain writers and texts: at the time when works that later became elevated to the status of masterpieces were produced, their authors defined their positions through competition on an equal footing with their peers who are now considered "minor" or have been "relegated to oblivion" (Johnson 1993, 12). Studying the field of cultural production at a specific time and place in history therefore entails reconstructing the competition that took place between the agents that produced cultural products, and attempting to recover the suppressed relations hidden underneath the self-evident givens.

Chapter 4 of the present thesis considers the cultural field disrupted by the practices of an oligarchic thought collective between 432 and 403 BC, and Plato's strategic representations of this collective. When considered in terms of Bourdieu's model, *The Republic* can be read as an Athenian cultural product that defines its position through explicit reference to the practices associated with Homeric poetry and Athenian drama, and through implicit reference to the statements of Ionian and Eleatic reflective thought, while dialogues like *Protagoras*, *Gorgias*, and *The Sophist* can be read as cultural products that articulate a distinctly Athenian thought style (*philosophia*) through the characterization, castigation and suppression of the foreign practices associated with the agents of sophistry. The consecration of Plato's dialogues as the fundamental texts of Western thought obscured both the context in which they were articulated and their antagonistic functions. *The Republic* can be read as the heretical challenge of philosophy (i.e. the written representation of argumentation) to the orthodox educational practices conveyed through the oral recitation of epic poetry (Havelock 1963), while the Platonic dialogues that represent the sophists can be viewed as homogenizing and violent distortions of the heterogenous anti-dogmatic and practical thought styles that had been circulating in Athens in the fifth and fourth centuries BC (Wallace 2007). It can be argued that Plato's representations of the sophists had a specific function, i.e. to suppress the practices and texts of itinerant foreign thinkers, and the success of this strategy is indicated by the fact that the positions articulated by the sophists in the cultural field have to be reconstructed from Plato's negative depictions.

According to Bourdieu's model, when a text is published what is at stake is the distribution of various forms of capital: economic, social, cultural, symbolic, educational. The publication and sale of a book does not merely produce economic capital as a surplus value after material and labour costs have been met: it can also increase the legitimacy of a form of

knowledge production, increase an agent's power in an institution through generating social honour, or make an institution itself more prestigious. Cultural and symbolic capital are largely dependent on the participants of the field believing in the legitimacy and value of the capital at stake (Jenkins 1992, 53). Without recognition or belief, a book can be reduced to ink and paper, a university to bricks and mortar.

Jenkins argued that Bourdieu's model of the field "is essentially one of equilibrium and stability", and one which struggles to account for social change, since the dispositions of habitus and the "objective structures" of the field tend to reproduce relationships of domination (Jenkins 1992, 57-58). I would argue that this interpretation is only possible if certain potentials of the field of cultural production—as indicated by Bourdieu in essays published between 1983-1989—are ignored. Bourdieu's concept of "heretical break" signals that some participants in the cultural field are able, as newcomers, to "'get beyond' ['*dépassent*'] the dominant mode of thought and expression", for example through parody, and this can even be considered as "*emancipation*" (Bourdieu 1993, 31, italics in original). The model of cultural production clearly suggests that heretical innovation can impact social relations. Culture and society are not merely reproduced as the same: there are breaks from orthodoxy, rejections of the dominant ideas, and successful introductions of rival modes of production.

Thus, to extrapolate, appearance of a new book—or other textual innovations, such as a new style of public speaking (e.g. Socrates, Cicero), or a new way of delivering lectures (e.g. Vesalius)—can bring about a change in 'the space of possibles' and upset the power relations in the field. A text—or even a new textual format made possible by new technology—can disrupt the field and displace the "previously dominant productions" (Bourdieu 1993, 31-32). Similarly to Laclau and Mouffe's concepts of hegemony, discursive struggle and the social, Bourdieu's model of cultural production depicts the social world as an arena of perpetual struggle—between power, forces, institutions, and agents. The notion of "heretical break" and the evidence of changes in cultural production and consumption suggest that this struggle is not always "typically doomed to merely reproducing the constraints against which it is pitted" (Jenkins 1992, 61).

Crucially, since Bourdieu abandoned any form of reductive economism which would reduce struggle in the field of cultural production to a struggle between social classes (1993, 35), this allows such struggle to be conceived as occurring between different social groups and over different forms of capital (i.e., not just economic capital and the material means of production). When focusing on the twentieth century art world and elitist literature in the nineteenth and twentieth centuries, Bourdieu defines the struggle in the cultural field as an intra-

class conflict: heretical forms of cultural production are introduced by the dominated fraction of the dominant class, while orthodox forms are upheld by the dominant fraction of the dominant class . The conflict is framed predominantly as a contest for symbolic and cultural capital, rather than economic capital. Bourdieu's model has considerable explanatory power when applied to actions that economism would struggle to account for. For instance, it explains why Vesalius sank his own money into the publication of his prohibitively expensive *Fabrica*, or why aristocrats like Francis Bacon and Robert Boyle devoted time and energy to scientific pursuits and projects that generated no financial gain: sacrificing or wasting economic capital can lead to a dramatic increase in an agent's cultural and symbolic capital.

Bourdieu's analysis refers to the classical descriptions of French class structure (working class, petite bourgeoisie, bourgeoisie, upper bourgeoisie, aristocracy) and frames the struggle in late nineteenth century literature in terms of a conflict within the dominant class: the young generation of the bourgeoisie positions itself as 'avant-garde' or 'bohemian' in opposition to the commercial art of the consecrated generation of older artists . This model of heretical position-taking within the dominant or ruling class can be applied to the phenomena from other periods: in addition to Plato's attack on Homer and poetry mentioned above, which can be construed as the younger generation's rejection of the dominant modes of thought and expression epitomized in the practices of *paideia*, Vesalius's vitriolic criticism of Galenism, supported by a circle of loyal university students and allied with international commercial networks involved in the book trade, can be framed as the younger, cosmopolitan generation's rejection of the dominant modes of knowledge production and dissemination operating in the universities. The model can also be applied to the ideas and practices advocated by the proponents of *Bildung* in the German universities roughly between 1730 and 1820 which, while less 'heretical' than the scathing criticisms of Plato and Vesalius, can still be viewed as oppositional articulations—typically those of the lower middle-class *burghers* who populated the philosophy faculties, and who, as the dominated fraction, attempted to wrest control of the university—as an institution—away from the dominant social group of state administrators, lawyers and theologians.

When applying categories such as 'dominant class' and 'burghers', it has to be borne in mind that the ontological status of Bourdieu's classes is a complex and thorny issue.[20] On the one hand, there are "classes on paper" (Bourdieu 1991, 231), i.e. theoretical representations that are used to carve up the social space. In this aspect, classes are to some extent arbitrary, in

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[20] For an example of a highly critical assessment of Bourdieu's conception of class, as presented in Distinction, see (Ester 1981)

the sense that agents can be "organized in accordance with other principles of division – ethnic, national etc." (Bourdieu 1991, 233). On the other hand, Bourdieu posits "a space of relations" and "a field of forces" that exist and operate prior to and outside of subjective representation, which shape perception and even structure the "objects of the social world". Thus, in a certain complex sense, certain objects—e.g. institutions, social classes—can be said to exist independently of agents' perception of them, and also exterior to the constructions of the current discourses (i.e. theoretical-symbolic representation).

If Bourdieu's model is applied to Foucauldian discursive and non-discursive practices, and to Laclau and Mouffe's articulatory practices and material discourse, these phenomena become situated in a "pre-structured space" that contains both current discourses and an exterior social world that has been structured by forces, relations and past discourse. In other words, the world 'outside' the constructions of the current discourse is a world that has been shaped and embedded with past discourse. The previous couplings and "reciprocal structuring of habitus and field" entail that "the present state of the field is the result of its own prior construction" (Fogle and Theiner 2018, 230). While Laclau and Mouffe insist that "every object is constituted as an object of discourse" (1985), meaning that we cannot access objects except through the mediation of discourse, Bourdieu's model posits that such mediation encounters a world that has always already been structured by discourse and populated with socially constituted objects.

Bourdieu's contextualization of discourse posits that before agents perceive the social world through "the labour of representation" and articulate their symbolic collective identities, a great deal of historical structuring has always already taken place:

> The perception of the social world is the product of a double social structuring: on the 'objective' side, this perception is socially structured because the properties attached to agents or institutions do not make themselves available to perception independently, but in combinations whose probability varies widely […]; on the 'subjective' side, it is structured because the schemes of perception and evaluation susceptible of being brought into operation at a given moment, including all those which are laid down in language, are the product of previous symbolic struggles and express, in a more or less transformed form, the state of symbolic relations of power (Bourdieu 1991, 234)

If this framework of double social structuring is applied to classes, when agents perceive themselves as belonging to a social class, or perceive other agents as belonging to the same or other social classes, they draw on pre-existing concepts and categories that were produced in previous symbolic/ discursive struggles (the 'subjective' side of the social structuring), but at

the same time this perception is shaped by the environment of forces and relations that pre-structure the social world (the 'objective' side of the social structuring). Thus while an agent's perception of the social world is necessarily subjective and mediated by discourse, the position from which the agent perceives this world can be described 'objectively', because it is possible to situate the agent within an environment that is independent of their subjective perception, and to identify the factors (e.g. relations, social position and standing, discourses) that determine how the agent perceives the social world.

To begin bringing Bourdieu's model into alignment with Fleck's theory, it can be said that the position an agent occupies in a field is determined by non-arbitrary elements. An agent's economic capital can be subjected to statistical analysis, and thus be measured and compared with other agents who have similar properties attached to them (type of profession, income, educational background, the place of residence etc.). Although the choice of measure is arbitrary, since other categories (e.g. gender, ethnicity) and other forms of capital (e.g. social, cultural) could be the main focus of the analysis, and because the category of social class divides the continuous field of the social into discontinuous aggregates, the *relationships* identified between agents on the basis of arbitrary measures are not themselves arbitrary.

As was mentioned in 2.4, Fleck argued that the fact that oxygen has the atomic weight of 16 is conventional and arbitrary, but that if this measure is related to the atomic weight of hydrogen, i.e. 1.008, the ratio of the two weights "is a passive element of knowledge" (Fleck 1935a [1979], 83). In other words, *the active constructs of a thought style do not determine the ratio discovered through the use of these constructs*. In a similar way, Bourdieu's model suggests that *the relationships between the positions agents occupy in a field are not arbitrary*: no amount of discursive manipulation will equate the social standing of a homeless person with that of a superyacht-owning oligarch, even though the terms 'homeless' and 'oligarch' are arbitrary and conventional. Thus Bourdieu's frequent uses of the word objective—e.g., "objective power relations", "the objective structure of the social world", "the objective world" Bourdieu 1991, 229-240), "objective positions", "objective competition between positions", "objective chances", "objective probabilities" (Bourdieu 1993, 29-64)—can be viewed as designating epistemic content that contains elements exterior to the active constructions of the perceiving or cognizing subject. In this sense, Bourdieu's objective relations refer to similar external determinants to those indicated by Fleck's passive elements.

Bourdieu's objective world can be defined as objective in two key senses: firstly, the positions, power relations and structures of this world always already exist prior to a given agent's perception of the field, and secondly, this world in which the agent finds itself is

populated with socially constituted objects that are both the result of previous discursive struggles and the embodiment of current power relations. Socially constituted objects—art galleries, universities, libraries, law courts, parliament, etc.—are recognized as such by agents, who accept and perpetuate the correct practices associated with each object and its field. At the same time, as the remnants of previous conflicts, such objects also perpetuate the relationships manifested in the field, and are often the instruments through which the ruling class maintains its position of dominance.

Following Jon Ester's criticism of Bourdieu's allegedly ambivalent, ambiguous and muddled theoretical framework (1983, 70), in the early 1990s Jenkins argued that Bourdieu's writings are plagued by contradictions between ontology and epistemology, i.e. that issues associated with how the social world is constituted are conflated with issues associated with how we know or explain this world. Thus for Jenkins it is not clear whether Bourdieu's field is a 'real' entity, a common-sensical category, or a purely analytical concept (Jenkins 1992). I would suggest that Bourdieu's concept of double structuring allows a field to be conceived of as both a real entity (a component of the pre-structured objective world of forces, relations and positions) *and* a partially arbitrary analytical concept (a category used to describe aspects of the agent's environment). Bourdieu's model is necessarily ambiguous because—like Marx's productive forces, Fleck's conception of passive elements, Foucault's indication of non-discursive practices, and Laclau and Mouffe's articulatory practices—it attempts the seemingly impossible: to get outside thought to think the external determinants of thought, to represent from within discourse the external social environment in which discourse is produced.

In stark contrast to Easter and Jenkins' near-contemporaneous criticism of Bourdieu's work, Nikolaus Fogle and Georg Theiner's recent juxtaposition of Bourdieu's sociology of practice with the theses of cognitive externalism shows how Bourdieu's theoretical apparatus can be shorn of ontological and epistemological muddle and applied to enhance "externalist accounts of culture and society" (Fogle Theiner 2018, 221). Stemming from the analytic tradition, philosophy of mind and cognitive science, the various strands of cognitive externalism are united in the conviction that human organisms and brains can be straightforwardly described as being situated in a world replete with externalized cognition. Thus phenomena like language, pen and paper, calculators, computers and smartphones can be conceived as tools that extend cognition beyond "the boundaries of skin and skull", as Andy Clark and David Chalmers put it in their key contribution to the externalist debate (1998), while libraries, museums and universities can be viewed as repositories of social knowledge that constitute socio-cultural

extensions of the human brain, which enable agents to accumulate and bank cultural capital (Fogle Theiner 2018, 234).

A pertinent externalist debate arose between Clark's extended epistemology and Edwin Hutchins' distributed cognition. Hutchins' critique of Clark's *Supersizing the Mind* (2008) argues that Clark, despite indicating the role of cognitive ecosystems, ultimately remains bound to "the Hypothesis of Organism Centred Cognition" (Hutchins 2011, 440). Put simply, Clark's model of cognitive externalism tends to be based on individual mental representations, such as the classic example of Otto, who suffers from Alzheimer's and uses a notebook to replace his biological memory (Clark Chalmers 1998, 12-13). Otto strategically extends *his* individual cognition beyond *his* skull and skin into a tool in *his* environment. Hutchins argues that this individualistic framework neglects the role of culture in organizing and distributing cognition: in Clark's model culture is conceived of as static, and Hutchins suggests that "cognitive science has adopted ways of speaking and thinking that render cultural practices invisible" (2011, 445). Instead of organism centred cognition, Hutchins advocates a mental flip that would focus on *cultural practices* as the drivers and carriers of "enculturated cognition".

Hutchins defines cultural practices as

> the things people do and their ways of being in the world. A practice is cultural if it exists in a cognitive ecology such that it is constrained by or coordinated with the practices of other persons. Above all else, *cultural practices are the things people do in interaction with one another*" Virtually all external representations are produced by cultural practices. All forms of language are produced by and in cultural practices (Hutchins 2011, 440, italics in original).

Thus, speaking, reading and writing are classed as cultural practices, as are ways of perceiving the world. In contrast to (his framing of) Clark's model of mental representation and static culture, Hutchins describes cultural practices as "fully embodied skills", and culture as the result of "dynamic historical processes" through which human cognition has constructed "assemblies" or "products" which have shaped the environment and created cognitive ecosystems. Human organisms act in environments that have been modified and organized by other brains. As a result of this "mental flip", the contributions of an individual brain and its mental representations to externalized cognition become rather negligible: the real forces that assemble and organize cognitive ecosystems are cultural practices.

Hutchins' emphasis on cultural practices, embodied skills, assemblies and cognitive niches clearly resonates with Bourdieu's focus on practices and his concept of the field. Hutchins' characterization of assemblies as culturally constructed products (2011, 442) can be viewed as designating the same kind of entities as Bourdieu's concept of social objects (i.e. institutions). Fogle and Theiner also draw on other recent contributions that are compatible with Bourdieu's theoretical apparatus, such as cultural niche construction theory (NCT), and the concepts of scaffolding and entrenchment as used in educational theory, to argue that cognitive processes both modify the environment and are modified by it: cognition is externalized, distributed and stored throughout the environment in which agents find themselves (e.g. in the cultural practice of language, in repositories and centres of knowledge production, in the techno-mediation of the Internet), but agents are also able to exploit these cognitive resources in order to shape their environment. Thus understood, cognitive externalism can posit that the cognition and cultural practices of habitus are coupled with the cognition-rich environments of the field in positive feedback loops of co-constitution, co-dependence and mutual modification. It bears emphasizing that this model stands in stark contrast to the classical models of one-directional determination (economic base > cultural superstructure, non-discursive > discursive practices).

In Fogle and Theiner's reading, cognitive externalism can enrich Bourdieu's sociology through rigorous and explicit focus on cognition and epistemology, which were neglected in Bourdieu's writing due to his reaction to "scholastic" intellectualism and his emphasis on practical knowledge and embodied skills. Thus, when viewed through the lens of cognitive externalism, habitus is coupled to a field which—in addition to the pre-structuring of forces, positions and relations—is pre-organized by the cognition embodied and distributed in bio-external cultural practices. At the same time, cognitive externalism, which has tended to neglect explorations of culture and society, benefits from a Bourdieu-inspired focus on cognition as an aspect of habitus: i.e. as practical and embodied forms of knowledge acquired through socialization and acculturation (Fogle Theiner 2018, 222). Bourdieu's theoretical model shows that the socially extended cognition that is distributed through the environment, which shapes and is shaped by habitus, is not politically neutral: from the perspective of the agent, cognition is a differential activity that identifies agents with other agents in similar positions and that distinguishes them from other groups; from the perspective of the field, it was externalized cognition that pre-structured the environment and that is instrumental in maintaining relations of dominance in the social space.

A particularly refreshing aspect of this cognitive externalist reading of Bourdieu, as well as Omar Lizardo's treatment of Bourdieu as a cognitive sociologist who can be interpreted as advocating a form of "embodied cognition" (Lizardo 2019), is that Bourdieu's theoretical apparatus can be used to escape from the binaries of the Western rationalist tradition (e.g. mind/body, nature/culture) and the reflexive paralysis that characterizes the post-Kantian critical tradition (e.g. the prohibitions and hesitation regarding reference to the world outside of representation). The restriction epitomized in Foucault's dictum "one remains within the dimension of discourse/*On demeure dans le dimension du discours*" (Foucault 1969 [1989], 85)) is circumvented by positioning discursive representation in socio-cultural contexts that are full of externalized and distributed cognition. Cognition is matter-of-factly treated as embodied in both the physical, material bodies of agents and in "a variety of extra-personal sites" (Lizardo 2019). In such cognitivist approaches, the residual hesitation and reflexive entanglement that is found in Bourdieu's writing, due to the legacy of structuralist discourse analysis, is simply discarded, and the muted elements of embodiment and externalization are brought to the fore (Lizardo 2019).

To sum up, Fleck's thought collectives and thought styles can be situated within Bourdieuan fields of cultural production if such fields are conceived as the result of the interaction between, on the one hand, cognizing thought collectives that represent their environment and articulate positions with the concepts and categories of their thought styles, and on the other hand, a cognized, already-cognition-rich environment consisting of socially constituted objects, as well as the structures, forces and relations which determine 'objective' positions—objective in the sense that cognition does not determine the relations between them. Thus Fleck's 'passive elements of knowledge', as the non-arbitrary relations encountered in the cognized, can be reconceived as partially produced by Bourdieu's fields. In addition to the 'natural' objects constructed by a thought style, such as disease entities, species, anatomical organs etc., whose 'passive elements' are in no way generated by a Bourdieuan symbolic field, thought collectives are also located in specific positions in the field of cultural production, and are thus in the midst of cultural objects and the social structures produced by earlier and other cognizing agents and groups. In other words, Fleck's thought collectives perceive and cognize both 'natural phenomena' (which become constructed as entities like bacteria and anatomical organs) and 'cultural products' (whose elements already contain earlier constructions, e.g., language, discourse, concepts, externalized cognition, other thought styles etc.). The 'passive elements' of cultural products are thus formed from both non-arbitrary relations (Bourdieu's 'objective' social positions) and the results of earlier externalized active construction. And just

as the objects constructed in the natural world are the result of mutual interaction between the enculturated cognition of a thought style and non-arbitrary perceptual content, there is mutual interaction when a thought style relates to the externalized cognition distributed through the pre-structured cultural field. Bourdieu's concept of double structuring entails that, on the subjective side, a thought collective discursively and differentially represents itself and other thought collectives, while being discursively and differentially represented by other self-representing thought collectives; and that, on the objective side, these representations are determined by the position the members of the thought collective occupy in a pre-structured field (of cultural production, for instance).

Bourdieu's theory also posits the underlying forces driving in this double structuring: the cognitive interaction and symbolic-discursive representational struggle occurring between thought collectives in the field of cultural production ultimately concerns the distribution of cultural capital. When a thought collective articulates a new (heretical) thought style in the form of utterances and publications that are distinguished from the (orthodox) style and products of the dominant thought collective in the field, what is ultimately at stake is a redistribution of social and cultural capital from one thought collective to another. Such redistribution is manifested in book sales, the widespread acceptance of a scientific theory, the consecration of artists, scientists and philosophers, the funding and patronage of scientific societies, the control, transformation and creation of educational institutions, the establishment of canons, schools and traditions. While Fleck's theory of thought collectives and styles sheds light on the social determinants of perception and cognition, and indicates the factors that are involved in the emergence and transmission of new ways of thinking, Bourdieu's theory provides conceptual tools for exploring the external factors that position thought collectives and shape their styles.

3.6 Methodology – a summary

The subsequent chapters of this thesis attempt to apply Fleck's theory of thought collectives and thought styles to account for cultural change, using the following methodology:

1. Fleck's key concepts, i.e., thought collectives, thought styles, esoteric and exoteric circles, collective mood, intellectual unrest, proto-ideas, the circulation of ideas, can be applied in the direct interpretation of source texts (and translated source texts).
2. However, it is necessary to support the interpretation of source texts with historical and cultural studies to consider the broader contexts in which these source texts emerged

and in which thought collectives operated. Reference to scholarly accounts of these contexts has to be made with caution, since contextual facts are constructed through the interpretations of the authors' thought styles, which, of course, are not neutral.

3. The functionalist conception of ideology (Rosen Wolff 1996) (Žižek 2012) can be applied to explain the relations of dominance involved in the articulation and transmission of a thought style. This allows Marxist accounts of to be drawn on when considering the socio-economic position of a thought collective.

4. The concept of discourse is a necessary concept for the application of Fleck's concepts: firstly to position Fleck's active, socially-conditioned elements of cognition within a system of relations and practices that defines possible subject positions (Foucault 1969 [1989]); secondly, to reflexively treat thought collectives as discursive constructs and thought styles as differential articulations (Laclau Mouffe 1985).

5. The concepts of material discourse (Laclau Mouffe 1985) and the field of cultural production (Bourdieu 1993) allow Fleckian thought collectives and styles to be conceived as positioned in environments that are already structured with meaning and externalized cognition (Fogle Theiner 2018). Thought collectives and styles are both shaped by and modify these pre-structured environments, and cultural change arises when—as a result of Fleckian factors such as intellectual unrest, the circulation of ideas—a heretical articulation challenges the orthodox, dominant thought style.

The following chapters should be viewed as an experimental and always-provisional application of Fleck's concepts in an attempt to account for cultural change. The application is made with acute awareness of the fact that Fleck's model lacks a criterion for evaluating the accounts provided by alternative or conflicting thought styles. In this regard, Leszek Nowak's concept of explanatory power may prove useful. Nowak's idealizational theory of science suggests a model for evaluating competing theories (paradigms) in the social sciences: consideration should be given to "the proportion of facts explained by the theory to the facts in a given domain" (Nowak 2012, 38). During the subsequent chapters, a factor that can always be borne in mind is whether the application of Fleck's concepts sheds light on new facts or new aspects of accepted facts in the domain of cultural change.

Part Two: Application

Chapter 4: Applying Fleck's Theory to the Emergence of Philosophy as a Cultural Practice

The application of Fleck's theory to the study of Ancient Greek thought is justified since diverse and various scholarly traditions—academic philosophy, classical philology, historiography, cultural studies, the philosophy of science—have identified and framed two key epistemic shifts that occurred between 700 and 350 BCE in Greek-speaking and cities and colonies. Through complex layers of sedimented discursive practice, these epistemic shifts—*or changes in thought style*—have been variously identified, constructed and positioned as foundational for Western thought, and as triggering the subsequent development of European culture. The two key changes can be broadly identified as:

1) the emergence of 'naturalist' 'scientific' or 'non-mythological thinking' in Ionia in the 6th century BC, later variously reconstructed as "the birth of philosophy" (Guthrie 1962, 29), the emergence of "rational thought" (Barnes 1979, 3), the Ionian Enlightenment (Schrodinger 1954, 53-68) or "the Presocratic Enlightenment" (Popper 1998, 8-10).

2) the subsequent self-differentiation of Athenian philosophy in the 5th and 4th centuries BC, in response to Ionian, Eleatic and sophist thought, articulated either as a) the "Socratic caesura", or b) as a continuation (Laks 2018, 1-18), e.g., through Aristotelian appropriation.

The scant surviving textual fragments have been reconstructed as evidence that a qualitative shift occurred in the style of thinking of a specific epistemic community, i.e. the elite "knowledge specialists" (Sandywell 1996, 104) in Miletus and the Ionian colonies, and this has been more broadly framed as a shift that occurred in the thought style of a more general collective, e.g. in 'Greek thought'. The shift is reductively framed in the transition from *mythos* to *logos*, i.e. from a religious, mythopoeic mentality to philosophical-scientific rational thought. In authoritative accounts and analyses of the history of philosophy and science, this shift has been treated as an absolute discontinuity, e.g. (Nestle 1940), (Guthrie 1962), (Kirk Raven 1957) and (Barnes 1979). In a particularly dramatic framing, the appearance of philosophy is

identified with the emergence of a new species: "pre-philosophical man" suddenly became philosophical man (Guthrie 1962, 26).[21]

Yet at the same time a countertendency can be identified in significant works of scholarship which complicated and the *mythos*/*logos* binary: by emphasizing the persistent presence of mythological-religious elements in Ionian-Milesian thought, e.g., in F.M. Cornford's Durkheim-inspired *From Religion to Philosophy* (1912); by highlighting that rational arguments and justifications can be identified in 'pre-philosophical' texts, such as Hesiod's poetry (Teggart 1947); by tracking the distributed emergence of critical attitudes and rational argumentation in Greek culture, for example in the empirical research initiated in nascent medicine and astronomy (Lloyd 1979); and by arguing that Greek rationality appeared primarily due to new social relations and practices that had emerged in the *polis* and were subsequently codified in laws and externalized in political institutions, thus proposing that the rationality articulated in Greek philosophy reflects the more deep-seated rationalism already distributed through the social realm (Vernant 1982).

From the perspective of Fleck's theory, the emergence of an ostensibly naturalist philosophy in Miletus in the 7th and 6th centuries BC suggests that a change occurred in the thought style of a specific thought collective. However, the study of this change is complex and entangled, since all of the utterances and statements authored by the representatives of this specific thought collective were preserved, filtered, reconstructed and interpreted by later Attic schools that had their own discursive agendas. The study of Ancient Greek thought collectives cannot avoid considering the discursive struggles embodied in these reconstructions and strategies, and especially the role of Athens in the selection, filtering, interpretation and transmission of Ionian cultural production. Scholarly accounts of the Homeric epics accept that these Ionian poems were standardized in Athens during the 6th century BC, due to the Pisistratean Recension, and that a thin layer of Attic diction was added to the dominant Ionic dialect (Finkelberg 2000). A central thesis of this chapter is that in the 5th and 4th centuries BC the Athenian discursive practices and strategies associated with the representation and transmission of non-Attic thought became more aggressive: the self-differentiation of Athenian philosophy articulated by the thought collectives associated with Socrates, Plato and Aristotle

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[21] The shift 'from mythos to logos' also underpins the fundamental binary categories of late 19th and early 20th century anthropology and psychology, and even mid 20th century structural anthropology, where the shift is formulated as primitive/civilized, religion/science, the raw and the cooked etc. In Chapter 2 we saw how Lévy-Brul focused on the transition from the pre-logical, mythological mentality to the logical mentality (Lévy-Bruhl 1910 [1926]). Like Cornford, Lévy-Brul, insisted that the pre-logical mentality never completely disappears, thereby undermining the notion of a shift to pure rationality, he nevertheless maintains the key conception of a transition from one mentality to another.

necessitated criticism of the practices associated with Ionian poetry, the suppression of itinerant and 'foreign' sophist thought through homogenizing, negative representations, and transmitting Ionian naturalism through an Attic interpretative overlay.

The surviving remnants of this conflict are: Plato's dramatic representation of Socrates' attacks on Homer's epics, Hesiod's poetry and Attic tragedy throughout *The Republic*; Plato's reconstruction of Socrates' criticism of 'natural science' and Anaxagoras's explanation of reasons/causes (*Phaedo* 96a8, 97c-99d); the mathematical-teleological cosmology presented in Plato's *Timaeus*, which can be viewed as a response to the Milesian 'physical' cosmology and Democritus's atomic theory; and the Aristotelian-Peripatetic textual reconstructions of "the first philosophers" (*Metaphysics* 983b). Hence studying the emergence of the Milesian 'naturalist' thought style necessitates consideration of the strategies deployed by temporally and geographically distant thought collectives as they engaged in discursive struggle and asserted their own thought styles and forms of cultural production.

4.1 The 'from myth to logos paradigm'

As Richard Buxton pointed out, for an extended period it was unproblematic for German and Anglophone scholars to identify the reconstructed, fragmentary statements of Thales and Anaximander as contributing to the evidence that ancient Greek civilization "underwent a general development from myth to reason" (Buxton 1999, 1). Thus, following the central thesis of Wilhem Nestle's *Vom Mythos zum Logos* (1940), scholars such as W.K.C. Guthrie (1953) and Kirk-Raven-Schofield (1983) propagated the triumphalist 'from… to' account of Greek thought which posits the occurrence of a "fundamental shift towards rationality".

According to Buxton, this scholarly paradigm identified a general tendency in many manifestations of Greek thought during the 6th and 5th centuries BC—now designated by the disciplines of "philosophy, historiography, medicine, technology"—in which mythical or mythopoeic explanations were abandoned in favour of rational explanations. While there may have been disputes as to how gradual or permanent this shift was, in the scholarship there was no doubt that such a shift occurred, and Thales was treated as its "standard-bearer" (Buxton 1999, 2).

Thus, according to the 'from … to' perspective, the following textual excerpts can be treated as evidence that a clear shift occurred in the way that certain Greek-speaking people perceived and thought about the world:

i) Homer, The Iliad, Book XV (190-199) – c. 800 BC.

Three brothers we are, all sprung from Cronus,

all of us brought to birth by Rhea - Zeus and I,

Hades the third lord of the dead beneath the earth.

The world was split three ways. Each received his realm.

When we shook the lots I drew the sea, my foaming eternal home,

and Hades drew the land of the dead engulfed in haze and night

and Zeus drew the heavens, the clouds and the high clear sky,

but the earth and Olympus heights are common to us all.

So I will never live at the beck and call of Zeus!   (Fagles 1990)

ii) Hesiod, Theogony – c. 800-700 BC

(126) Earth first of all bore starry Sky, equal to herself, to cover her on every side, so that she would be the ever immovable seat for the blessed gods

iii) Thales c. 624 – c. 545 BC

Of those who first pursued philosophy, the majority believed that the only principles of all things are principles in the form of matter. For that of which all existing things are composed and that from which they originally come to be and that into which they finally perish—the substance persisting but changing in its attributes—this they state is the element and principle of the things that are. . . . For there must be one or more natures from which the rest come to be, while it is preserved. However, they do not all agree about how many or what kinds of such principles there are, but Thales, the founder of this kind of philosophy, stated it to be water. (Aristotle, Metaphysics 1.3 983b6–27)

iv) Anaximander c. 610–c. 546 BC

Anaximander said that the first principle and element of existing things was the boundless; it was he who originally introduced this name for the first principle. He says that it is not water or any of the other so-called elements, but something different from them, something boundless by nature, which is the source of all the heavens and the worlds in them. And he says that the original sources of existing things are also what existing things die back into 'according to necessity; for they give justice and reparation to one another for their injustice in accordance with the ordinance of Time', as he puts it, in these somewhat poetic terms.

From Simplicius, *Commentary on Aristotle's 'Physics'*, CAG IX, 24.14–25 Diels (Waterfield 2000)

v) Plato c. 428- c.347 BC

Listen then, and I will tell you. When I was young, Cebes, I was tremendously eager for the kind of wisdom which they call investigation of nature. I thought it was a glorious thing to know the causes of everything, why each thing comes into being and why it perishes and why it exists; and I was always unsettling myself with such questions as these: Do heat and cold, by a sort of fermentation, bring about the organization of animals, as some people say? Is it the blood, or air, or fire by which we think? Or is it none of these, and does the brain furnish the sensations of hearing and sight and smell, and do memory and opinion arise from these, and does knowledge come from memory and opinion in a state of rest? (Phaedo 96a-b) (Lamb 1966)

vi) Aristotle 384–322 BC

How much knowledge, then, does a natural scientist have to have about form and what a thing is? Just as much as a doctor has about sinews or a metal-worker has about metal, which is to say as much as it takes to know what the purpose of a given thing is? And only about those forms which are found in matter, although they may be separable in form? After all, a man is created by a man, and by the sun as well. Questions remain—in what sense is anything separable? What is it that is separable?—but it is the job of first philosophy to answer them. (Physics II.3. 194) (Waterfield 2008, 39)

The classic 'from … to' model identifies a distinct shift in the conception and explanation of natural phenomena, which can be traced through the above textual fragments: from the earth, sea and sky being viewed as subject to the arbitrary whims and interventions of supernatural authorities, to a domain of a rational nature "united under a common law" (Vlastos 1947), where external supernatural beings are replaced by integrated and immanent elements, principles and causes. The questioning and focus on causes in the passages from Plato and Aristotle can be framed as a reflective intensification and continuation of this shift towards rationality, or as the appearance of a discontinuity, i.e., "the Socratic caesura" (Laks 2018, 17).

At first sight, this model of a clear-cut paradigm shift in Ancient Greek thought seems to suggest that there is substantial scholarly evidence that could be used to support Fleck's theory, i.e., to claim that a straightforward change in thought style occurred: from a 'mythopoeic' thought style to a 'rational-scientific' or 'philosophical' thought style. However,

there are two main problems with the identification of such a straightforward shift. The first is that the classification of all pre-Milesian thought and textual products as 'mythological' or 'mythopoeic' is a simplification that reduces heterogenous forms of cultural production to one homogenous category.

This tendency was epitomized by the academic philosopher Jonathan Barnes, who credited "the Presocratics" with being "the fathers of rational thought", in a move that simultaneously classed all pre-Milesian narratives as "dogma":

> Scholars often, and rightly, contrast the naturalistic cosmogonies of the Milesian philosophers with such mythological stories as we find in Hesiod's *Theogony*. Yet the essence of the contrast is sometimes misrepresented: what is significant is not that theology yielded to science or gods to natural forces, but rather that unargued fables were replaced by argued theory, that dogma gave way to reason. (Barnes 1979, 3)

Here, the diverse, complex and multifunctional narrative forms that came to be classed as epic poetry, lyric poetry and wisdom texts are reduced to two distinguishing features: the genre of "mythological stories", and the negative definition of "unargued fables", i.e. narratives lacking rational argument. When reduced and categorized in this manner, Hesiod's *Theogony* is lumped together with an indefinite and undifferentiated mass of "theology" that is strategically evaluated as pre- and non-rational.

If it seems unfair to seize on passages of a work of academic philosophy from 1979, a more recent example of how Hesiod's *Theogony* is evaluated and exploited for strategic contrastive purposes is provided by Cohen, Curd and Reeve in *Readings in Ancient Greek Philosophy* (2011), this time with some quite astounding suppositions concerning the poet's thought processes and attitudes towards his audience: Since Hesiod feels no compunction about asserting his claims without reasons to support them, he seems to think that the proper response to the story is acceptance. The hearer or reader should not subject it to critical scrutiny followed by rational agreement or disagreement". This characterization is leveraged to assert that, in contrast to Hesiod, the Milesians "took a bold leap in adopting a critical attitude" (Cohen, Curd Reeve 2011, 3-4).

These representatives of relatively recent academic philosophy managed to set up and pillory Hesiod for his supposed lack of argumentation despite the fact that prominent scholars of the 1930s and 1940s had already highlighted the explanatory qualities and purposes of Hesiod's didactic poetry. For instance, in response to the positivist depictions put forward by

John Burnet and Theodor Gomperz in the late-19th century, which cast the pre-Socratics as empirical and scientific thinkers, in 1936 Werner Jaeger argued that the image of Greek philosophy as rational and scientific is based on minimizing or neglecting the continuous development of theological content in Greek poetry and philosophy. In other words, *theologia* (θεολογία), a term coined by Plato in *Republic* to denote accounts of the divine, can be identified as the fundamental preoccupation of Hesiod's *Theogony*. In this framing, Hesiod's "original explanations and constructions", which account for the origin of the gods and address "the problem of toil and hardship" in *Works and Days*, constitute a preparatory stage in the development of Greek thought focused on the divine, exemplified by Empedocles, Parmenides, Plato's *Republic* and Aristotle's *Metaphysics*; a tradition which was then continued by the Roman philosophy of Cicero and the Christian theology of St. Augustine (Jaeger 1947, 1-17). Thus, rather than the emergence of Milesian 'naturalism' and Athenian philosophy constituting a shift from myth to logos, these later thought styles developed the *logoi* presented in the poetry of Homer and Hesiod, but restated them with greater reflective consistency "in a new and generalized philosophical form" (Jaeger 1947, 17).

Similarly, in 'The Argument of Hesiod's Works and Days' (1947), the cultural historian Frederick J. Teggart argued that Hesiod's use of myth to address both conceptual and social *problems* signalled the arrival of "a new mode of thought". Like the Hebrew prophets who were his contemporaries, Hesiod recognized that his audiences required explanations for certain problems: "Homer tells a tale. Hesiod faces a problem, that of accounting for the existence of toil. But the recognition of this problem was not peculiar to the Greek poet. It is the very problem that is dealt with in the early chapters of *Genesis*" (Teggart 1947, 50). Crucially, Teggart highlighted how Hesiod's arguments were shaped by the form of cultural production through which they are conveyed: because *Works and Days* was "written for the ear" and recited with musical accompaniment, the audience had to be allowed pauses to absorb the chain of thought, entailing that—to our eyes—the topics and arguments seem to change abruptly (Teggart 1947, 57).[22] A sudden shift is evident in the transition from the story of Pandora to the account of the five races of humanity (*WD* 90-110), and in the switch from the general problems of human nature, toil and scarcity that occupy the first 383 lines to the very specific advice that is offered in the remaining sections of the poem (e.g. the direction in which a man should

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[22] Barry Gordon makes a similar point in *Economic Analysis Before Adam Smith*: "Its 828 verses are broken up into small groups suited to the requirements of solo vocal presentation. Rather than a continuous logical development appropriate to an academic treatise on the nature of work, different groups of verses take up individual aspects of the central theme in a pattern appropriate to song" (Gordon 1975, 4)

urinate, *WD* 727-8). The intriguing possibility that emerges when the context of oral performance is taken into consideration is that such breaks and pauses could have allowed for audience response and interaction. Thus, in contrast to the later arguments of Athenian philosophy, which were conveyed through the medium of continuous written prose and were— perhaps predominantly?—aimed at audiences that would have been able to read and reread the text in silence, Hesiod's arguments may have functioned more like Heraclitus' *logoi*, which M.M. McCabe suggests were deliberately dense and abrupt in order to stimulate audience reaction (McCabe and Adamsom 2010).

Teggart's comparative analysis claims that Hesiod and the Hebrew prophets offered "identical" explanations for the widespread social demoralization that characterized the era, which Hesiod captures with the concept of Wicked Strife (*WD* 11-26), but also suggests that they propose divergent solutions. While the prophets emphasized the ideal condition that would be received as the gifts of Yahweh, Hesiod repurposed the Homeric conception of the practice of justice: in Homer, justice is "attributed to the good guidance of a noble king; in Hesiod, it is to be attained through the efforts of the people themselves" (Teggart 1947, 68). This framing positions Hesiod's poetry as an essential element of the Greek tradition: in addition to presenting a new form of argumentation to account for social problems, it also begins the investigation into the acquisition of culture—with the myth of Prometheus (*WD* 48-52), later repeated in Plato's *Protagoras*—and introduces the idea that human progress can be attained through "common regard for justice" (Teggart 1947, 77).

The 'from myth to logos' paradigm which excludes Hesiod's *Theogony* and *Works and Days* from the sphere of logos—an exclusion which also automatically applies to the Homeric epics—can only be maintained by suppressing certain functions and features of these texts in the context of broader cultural-intellectual developments, such as the continuous tradition of attempts to account for the divine; by failing to appreciate that arguments can take various forms other than Socratic dialogue and syllogistic reasoning; by disregarding "the self-evident givens of the situation" (Bourdieu 1993, 31), such as the extent to which the form of cultural production—i.e. oral performance—determines the transmission and reception of thought; and by overlooking the contributions of scholars from the 1930s and 1940s who adopted a more inter-disciplinary approach.

Furthermore, application of the 'from myth to logos' paradigm is vulnerable to more fundamental criticisms: firstly, it involves the uncritical projection of certain oppositional categories that were established in the 5th-century writings of Pindar, Herodotus and Thucydides, and then consolidated in Platonic philosophy, back into an earlier field of cultural

production; and secondly, it perpetuates the Platonic strategy of reducing heterogeneous genres and cultural practices to homogenized caricatures. These charges will be explored in more detail in the next sections, but at this point it will suffice to point out that the categorization of Hesiod's *Theogony* as "unargued fables" (Barnes 1979, 3) and as the dogmatic assertion of "claims without reasons to support them" (Cohen, Curd Reeve 2011, 3), essentially reiterates an ancient discursive antagonism and uncritically applies the conceptual weaponry of the victorious party.

Jean-Pierre Vernant's observation on the treatment of myth is pertinent in this regard: "Here again modern scholars have simply followed in the footsteps of the ancient authors, remaining in a sense a part of the classical tradition that they had set out to study" (Vernant 1988, 220). The signifiers 'myth', 'logos', 'philosophy' and 'theology' are by no means neutral: they were coined and filled with meaning in discursive struggles that ultimately resulted in the hegemony of Athenian thought styles, genres and cultural practices.

As Lowell Edmunds indicates in his overview (2021), in the poetry of Homer and Hesiod, the words μῦθος (*muthos*) and λόγος (*logos*) or their associated forms were synonymous, and were neutrally used to denote speech, story, or account, with *muthos* being the more frequently used term. However, in Pindar's poetry and Herodotus's accounts *muthos* came to take on negative connotations, which suggests that—following the focus on *logoi* in Heraclitus' and Parmenides' texts—a standardised opposition was emerging, with *muthos* denoting "misleading tales" (Pindar, *Nemean* 7) and *logos* becoming associated with true accounts and understanding. By the time of Thucydides, the pejorative associations of *muthos* had become fixed in opposition to *logos* and *historia* (ἱστορία), i.e., misleading, foolish, exaggerated tales or fabrications vs. the true accounts or evidence-based histories. Edmunds frames the emergence of the Herodotean and Thucydidean discipline of history in terms of a discursive conflict: "both historians seek to oppose a new kind of discourse, even if it is different in each case, to another kind, represented by Homer and the poets" (Edmunds 2021). Thus, Plato's attack on the poets and *muthos* in the *Republic*, which results in draconian control over the form and content of poetic texts, and the banishment of certain forms of poetry from the philosophers' state, can be viewed as a decisive blow in an ongoing conflict. The continued exclusion of Homer and Hesiod's poetry from the canon of ancient philosophy, or philosophy's frequent claims to mastery over other disciplines and forms of cultural production in the modern era, can be treated as indications that this conflict is still very much alive.

Although the texts of the *Iliad*, the *Odyssey*, *Theogony* and *Works and Days* can be reduced to common characteristics, such as the fact that divine beings feature prominently and influence human affairs, important distinctions can also be made between each of the Homeric

epics, and between the poetry attributed to Homer and Hesiod, in terms of their social functions and the cultural practices they exemplify and support.

For example, in his monumental three-volume *Paideia* (1939), Jaeger contrasted the *Iliad*, which looks back to a bygone era and glorifies war and military prowess, with the *Odyssey*, which is more contemporaneous and representative of Ionian civilization during peacetime:

> In the *Odyssey* as in the *Iliad*, the highest standard of manly character is the traditional ideal of warlike valor. But the *Odyssey* also exalts the intellectual and social virtues. It is the man who is never at a loss for an apt word or a clever plan. His chief merit is his cunning—the fertile practical insight which saves his life and wins his return to his home through lurking dangers and powerful enemies. (Jaeger 1965, 22)

For Jaeger, the fundamental function of the Homeric epics was to educate by providing examples or pattern-lives—*paradeigmata*—for imitation, thus the shift from the conduct and speaking exemplified by Achilles in the *Iliad* to the schooling of Telemachus in social skills and responsibilities in the *Odyssey* marks a key transition in aristocratic ethics: from war and prowess on the battlefield to the discipline and courtesy necessary for life in the Greek states during peacetime (Jaeger 1965, 29-34).

In turn, Eric B. Havelock also emphasized the educational role of Homer's epics: they are said to have functioned as "a sort of tribal encyclopedia", containing detailed descriptions and re-enactments of customs and attitudes, ranging from how public debate should be conducted, how oaths should be sworn, to how ships should be unloaded. Moreover, these texts were assigned the functions of living encyclopaedias: the public performance of the poems, with rhythmical participation and emotional involvement, was key to the maintenance of the community (Havelock 1963, 61-84).

According to Jaeger, and later Barry B. Powell, Hesiod's *Theogony* served a more doctrinal purpose: in response to an influx of Eastern creation stories and motifs—Mesopotamian, Hittite-Hurrian—Hesiod situated the emergence of the traditional Greek gods within a broader narrative framework that both explained and justified their ascendancy (Powell 2017). Then, while *Theogony* clearly inscribes itself within the tradition of creation stories, modern scholarship has assigned Hesiod's *Works and Days* to the genre of "Wisdom Poetry" or "Wisdom Literature", "a genre well represented in Sumerian, Akkadian, Egyptian, Aramaic, and Hebrew documents", the purpose of which is to provide explicit guidelines on

correct behaviour through direct advice (Powell 2017, 102) (Stallings 2018). The evolution from Homeric *paradeigmata* to Hesiod's general rules of conduct can be treated as evidence of a tendency to abstract from the current situation and form generalised conclusions. Thus *Works and Days* can be considered "the first essay into economic analysis" in the European tradition, while Hesiod can be treated as a forerunner both of the sophists, who provided instruction on economics, and the philosophers, who continued his reflection on the organization of law (Gordon 1975, 2-3).

Thus the categorization of the *Iliad* the *Odyssey*, *Theogony* and *Works and* Days as "mythological stories" and "unargued fables" is a strategy that suppresses generic and functional heterogeneity and ignores developmental continuity. As the next sections will attempt to demonstrate, this strategy is straight out of Plato's playbook.

4.2 The Quarrel Between Poetry & Philosophy in the *Republic*

A prime example of an attempt to suppress generic heterogeneity is found in Plato's *Republic*. In Book 2, poetic narratives are reduced to one characteristic—fabrication, and are allowed one permissible function—educating children. In Book 10, poetry—now encompassing the Homeric epics and Athenian tragedy—is considered in terms of its effects on the adult population and is reduced to harmful *mĭmēsis* that appeals to the worst elements of the human psyche, which justifies its banishment from the ideal *polis*.

This section considers how Plato's attack on poetry and the poets in the *Republic* has been variously framed by the thought collective of academic philosophy, and then draws on literacy studies and historical accounts in order to consider Plato's attack on Homer and poetry on behalf of philosophy as the articulation of a heretical discourse and disruptive mode of cultural production. Put in more Fleckian terms, Athenian philosophy is viewed as a relentlessly adversarial thought style communicated by a specific esoteric thought collective that sought both to dislodge and supplant traditional cultural-educational practices and to combat emerging rival thought styles through the consistent use of discursive strategies.

4.2.1 The Scholarly Quarrel about the Ancient Quarrel

In the 20th century, Plato's attacks on poetry in the *Republic*, which he presented as just the latest blow in the ancient "quarrel between poetry and philosophy" (607b) (Shorey 1969, 465), were the focus of much scholarly debate. In the scholarly quarrel, the positions were

diametrically opposed, hinging on the position of the arguments presented in lines 595a- 608b, in what came to be recognised as 'Book 10', within the *Republic*'s overarching conceptual framework and its relation to Plato's other texts.

The attack on poetry treated as a gratuitous appendix

On one side of the quarrel, Book 10's renewed attack on poetry and its scathing rejection of Homer's epistemic authority were depicted as a poor-quality, inconsistent and unnecessary addition to the main argument of the *Republic*. The tone was set in 1897, when Richard Lewis Nettleship asserted that the attack on poetry in Book 10 is "disconnected from the rest of the *Republic*" (1897 [1951], 340). For Nettleship, Plato's "digression on poetry" in Book 10 is an overgeneralization written in response to the behaviour of the Athenian demos during the performances of tragedies, and thus only applies to lower forms of literature, which had "degenerated into indiscriminate catering for common excitement" (Nettleship 1897 [1951], 353). F. M. Cornford consolidated the scholarly consensus in his 1941 translation of the *Republic*, explicitly indicating that he had truncated Plato's attacks on Homer, Hesiod and Aeschylus in Book 2 (1941, 66) before dismissing the renewed attack on poetry in Book 10 as having "the air of an appendix, only superficially linked with the preceding and following context" (Cornford 1941, 314). An identical position was adopted by Julia Annas in 1981, who described Book 10 as "gratuitous and clumsy" and "an excrescence" (Annas 1981, 335).

In these accounts, it is the concept of *mīmēsis* (μίμησις) elaborated in Book 10 that receives the brunt of the scholarly ire. Nettleship notes that the concept of "imitation" presented in Book 10 has a broader sense than that outlined in Book 3, where it was decided that the guardians would only be exposed to or engage in imitations of virtuous conduct, while all other forms of the mimetic art would be prohibited (395-396). Nettleship acknowledges that Book 10's designation of poetry as three removes from the truth—as imitation of imitation—draws on the epistemological and ontological framework established after Book 3, notably the analogy of the divided line (509d–511e) and the definition of 'conjecture' (*eikasia*) as inferior to *doxa* (511e). Thus Nettleship recognizes the consistency between the epistemological and ontological distinctions outlined in Book 6, on the one hand, and, on the other, the consequences of these distinctions presented in Book 10, where the ontological status of *mīmēsis* is defined and it is implied that "the knowledge of the artist" is limited to the epistemologically inferior *eikasia* (Nettleship 1897 [1951], 347). However, Nettleship simply rejects Plato's conceptual framework and asserts his own views: while recognizing that Plato is focused on "a certain of

kind production or making", Nettleship bluntly insists "this is not a true account of artistic production" (1897 [1951], 345). In his view, the idea that the poet "represents, and only represents" is simply wrong: artists do more than merely hold up a mirror to nature and create superficial resemblances that cater to the worst instincts of the populace (1897 [1951], 344-353).

Annas also focused on the apparent inconsistencies between the concept and role of *mĭmēsis* presented in Book 3 and in the "gratuitous" excrescence of Book 10, and adopted a similarly evaluative stance. For Annas, Plato's attack on poetry in Book 10 is unsuccessful, since it is based on "hopelessly bad arguments" (1981, 344). Her first charge is that the second attack on poetry "changes the meaning and scope of 'imitation'". In terms of meaning, *mĭmēsis* shifts from the notion of expressing and representing conveyed in Book 3, to copying or holding up a mirror to things in Book 10, through the weak analogy between painting and poetry. Annas argues that the optical illusions created by a *trompe-l'œil* painter do not bear comparison with poetic images, and thus all the reasons for claiming the painter "lacks knowledge do not carry over to the poet" (1981, 337-38). Then, in terms of scope, while Book 3 casts only *some* poetry as mimetic (there is also "narrative" poetry (Jowett 1991), or "simple narration" (Shorey 1969)) (396e)), in Book 10 *all* poetry is reduced to imitation (Annas 1981, 336). Her second criticism is that while Book 3 recognized poetry can shape human character, and hence acknowledged that the poets wield an "important and dangerous" power, which justifies placing stringent controls on the content and form of poetry in the ideal *polis*, the arguments of Book 10 contradict this by attempting to trivialize poetry and suggesting that poets are not respected for their knowledge. Annas thus concludes that the *Republic* presents "two inconsistent views about poetry" (1981, 342). In her evaluation, the weak arguments focused on the ontological degradation of poetry and the rejection of the poet's epistemic authority cannot be taken seriously, while the stronger arguments which acknowledge the power and potential danger of poetry in civic life are more consistent with the position assigned to poetry and poets in other dialogues (e.g., *Ion*, *Phaedrus*).

These scholars explicitly register their sense of encountering something alien in Plato's concepts and strategies. Thus, for example, Nettleship: "it is very difficult to make sense of" (1897 [1951], 345); Cornford: "the point of view seems as perverse, and even stupid, as Tolstoy's in What is Art?" (1941, 314); Annas: "it is full of oddities" (1981, 335). From the perspective of Fleck's theory (1935a [1979], 125-26), these reactions can be treated as clear examples of a later thought style encountering 'alien' and 'foreign' elements in its interaction with an earlier thought style. To be more precise, a specific scholarly community of 20th-

century academic philosophers, which Havelock described as representing "the magisterial scholarship on Plato" (1963, 15, footnote 12), had a uniform and sustained reaction to certain unpalatable strategic positions articulated in a text produced by a representative of a specific Athenian thought style that emerged in the 4th century BC. Fleck's theory predicts that the communication between distant thought styles inevitably involves a transformation or distortion of concepts, especially when the communication occurs over a distance (spatial, temporal, subject matter) (Fleck 1936 [1986], 87). With the transmission of Plato's *Republic* and its reception by 20th-century academic philosophy—via various interpretative filters, such as Byzantine and Renaissance Neoplatonism, German classical studies (*Altertumswissenschaft*), and Anglophone positivist Plato scholarship—the inevitable distortion took the form of what can be described as a suppressive accommodation: the incompatible elements of Plato's text are suppressed through criticism and rejection to ensure it is kept in line with the humanistic thought style of modern academic philosophy, which tolerates the presence of poets, playwrights and novelists within the canon of European thought.

In contrast to this accommodating position, Plato's *Republic* has also been reconstructed as articulating a far more extreme and unorthodox position in the field of cultural production—one that cannot be comfortably reconciled with the humanist orthodoxy institutionalized in post-Renaissance universities. From this perspective, the educational program proposed in the *Republic* was entirely incompatible with the *studia humanitatis* of the Renaissance, which introduced the study of poetry to the curricula of Italian schools and universities (Grendler 1989), and with the subsequent institutionalization of the study of classical languages and literature in English and German universities in the 18th and 19th centuries (Hofstetter 2001). Plato's multipronged attack on the authority and educational role of Homer and Hesiod, and his evaluation of the impact of tragedy and drama on the psyche of Athenian citizens, cannot be reconciled with the status assigned to poetic texts, narrative literature, theatre, and other forms of artistic representation in later European fields of cultural production. As Thomas Gould astutely observed, "the removal of all that Plato found objectionable in Greek literature would take the heart out of Shakespeare, the Bible, Dostoevsky, and much of the best of the whole western tradition" (1990, 12).

The dismissal of Book 10 of the *Republic* as an inconsistent appendix requires a suppression or neglect of the cultural context in which Plato's text articulates its position. Nettleship acknowledged that Plato "was writing in a different atmosphere from our own" (1906, 58), in which tragedy and comedy had greater influence on human conduct, yet this atmosphere is only apprehended through its representations in Plato's dialogues: no effort is

made to consider the connections between Plato's texts and other texts, or to situate his arguments in a broader cultural context.

In contrast, Cornford's denigration of Plato's attack on poetry is somewhat perplexing. Citing T. B. L. Webster's 1939 essay 'Greek Theories of Art and Literature down to 400 BC' (Cornford 1941, 316), Cornford indicates that Plato's account of *mímēsis* adopts (and pillories) a theory that rose to prominence at the end of the 5th century, which viewed art as a likeness (*eikon*) of an original. In other words, Cornford actually acknowledges that Plato's second attack on poetry, the *mímēsis* argument, was culturally determined, i.e., was embedded within and responded to ongoing debate and theorization that had been taking place in the cultural field produced prior to the emergence of Plato's texts.

Webster's study is particularly interesting, as it situates the arguments of Book 10 of the *Republic* within a broader context of cultural production, theory and criticism which was initially centred on the concept of *mímēsis*: from the imitation of voices in Homer's *Odyssey*, through the Hippocratic treatise *On Diet* which describes "sculptors making an 'imitation' of the body", to Pindar's account of Athena inventing the flute to imitate the Gorgon's shrieks, Webster traces the development of the *mímēsis* theory over a period of at least one hundred years to its dominance in the time of Socrates and Plato (Webster 1939, 168).

At the same time, Webster also situates the *Republic* at the end of a period of substantial and more wide-ranging theoretical reflection on the nature and effects of poetry and tragedy. While Plato's accounts of the sophists' rhetorical theory provide evidence that by the fourth century "[g]rammar, vocabulary, argument, composition, and all the various ways of playing on the emotions of the audience have been worked out and reduced to a system", evidence of complex theorizing can also be located outside of Plato's texts: Aristophanes' *Frogs* shows that he "was well versed in literary criticism and that the craft of poetry had been well examined before he wrote", and the plays of Sophocles and Euripides bear witness to the consciousness that the task of artists was "the education of their fellow citizens" (Webster 1939, 170-71).

In effect, Cornford referred to a study that provided a detailed investigation of the context that Plato's arguments addressed and engaged with, yet avoids any discussion of how deeply the interaction between the *Republic* and this context might have shaped Plato's attacks on poetry. Webster argued that the *mímēsis* theory had attained dominance by 400 BC, and that the ancient quarrel between poetry and philosophy that Plato refers to can be traced back to Xenophanes and Heraclitus and their rejection of the authority of Homer and Hesiod (1939, 169). These intertextual arguments clearly undermined Nettleship's depiction of Book 10 as an

appendix or afterthought, yet Cornford—strangely—failed to address them, instead opting to consolidate Nettleship's framing.

While Nettleship and Cornford's accounts at least signalled awareness of contextual determination and cultural difference, Annas remained firmly focused on the internal consistency of the conceptual framework constructed in the *Republic* and across Plato's dialogues. In this perspective, poetry and philosophy are juxtaposed as purely abstract opponents, or at most genres that somehow influence people's behaviour (Annas 1981, 340). In other words, the quarrel between poetry and philosophy is investigated as a phenomenon occurring within the boundaries of Plato's texts, which, in turn, are treated as if they exist in a cultural vacuum.

The attack on poetry treated as the core argument

The other side of the scholarly quarrel responds to a provocative thesis that was put forward outside the field of traditional academic philosophy, namely in Eric A. Havelock's *Preface to Plato* (1963). As a representative of "the Toronto School" associated with Marshall McLuhan (Goody 2000, 111), which treated literacy as "a simple skill or technology which has certain standard, predictable effects on a society (e.g. rationality)" (Thomas 1992, 24), Havelock went against the consensus of the "magisterial scholarship on Plato" to argue that the attack on poetry in Book 10 of the *Republic* actually constituted the core argument and purpose of Plato's text (Havelock 1963, 15-16, footnote 13).

In a nutshell, Havelock argued that Plato's attack on poetry was first and foremost an attack on the practices and states of mind associated with the oral performance of poetry. In Havelock's framing, as was mentioned, Homer's poems functioned as "a sort of tribal encyclopedia" that provided models of correct conduct and procedures, and their oral performance in educational and public settings functioned to maintain the customs, habits and attitudes of the community (1963, 66-84). For Havelock, Plato's text epitomizes the shift from a predominantly oral culture to a literate culture: with its musical accompaniment and gestures, oral poetry was geared to memorisation, and while the introduction of the Greek alphabet in the 7th century BC and the coding of poetic texts in writing initially served to facilitate memorisation, by the 5th century the unique capacity of the Greek alphabet to capture speech triggered a switch to prose. Havelock explicitly framed this development in communication technology in terms of discursive conflict:

> The contrary conception of poetic inspiration was born in Greece precisely at that time, toward the end of the fifth century, when the requirements of oral memorisation were no longer dominant and when the functional purposes of poetry as a tribal education were being transferred to prose. At this point those who thought in prose and preferred prose—that is the philosophers, who were intent upon constructing a new type of discourse which we can roughly characterise as conceptual rather than poetic—were driven to relegate the poetic experience to a category which was non-conceptual and therefore non-rational and non-reflective. (Havelock 1963, 156)

Here, Plato's attack on poetry is depicted as an attack on the practices and state of mind associated with a specific communication technology—oral poetry, on behalf of the practices and a state of mind associated with a new communication technology—philosophical prose. In Havelock's reconstruction of the conflict, those who had adopted the new communication technology began to differentiate between the discourses by means of antagonistic binaries: the prose of the philosophers was defined as conceptual, rational and reflective, while poetry was pilloried as non-conceptual, non-rational, non-reflective. Thus, on Havelock's reading, the main purpose of the *Republic* was to show how philosophy could usurp the hegemony of oral poetry: by controlling its role in education (*paideia*) and banning any performances of narrative poetry or tragedy in the adult community that did not conform to the strict ethical requirements of philosophy. The new discourse of philosophy could not simply disseminate its texts and leave oral poetry alone, because this older communication technology was thoroughly embedded in the practices and institutions of Athenian society: the "'oral' state of mind" stands in the way of philosophy and constitutes "the chief obstacle to scientific rationalism" (Havelock 1963, 47). Only when oral poetry had been dislodged and supplanted could the practices associated with philosophy—i.e., critical reading, analysis, classification, generalization, dialectical argumentation—come to dominate in the culture and society. Oral poetry was thus identified as the "arch-enemy" that had to be defeated and mastered before philosophy could rule the *polis*.

In *Literacy and Orality and Ancient Greece* (1992), a study of key importance for the Plato scholarship of Penelope Murray (1996), Rosalind Thomas problematised Havelock's reductive technological determinism. Firstly, she characterised Havelock as an overly enthusiastic follower of Goody's absolute image of the consequences of literacy, which, despite modifications and increasing sensitivity over the course of decades, essentially argued that writing and literacy are "a force for logical and scientific thought, bureaucracy and the modern state, and law" (Thomas 1992, 18). Thus in this research current, societies tended to be divided

into literate and non-literate, with the introduction of literacy being treated like the addition of a catalyst in a chemical reaction: it causes certain predictable changes in any society. Secondly, Thomas suggests Havelock was an exponent of McLuhanist technological determinism, which reduced all methods of communication to matters of technology, and attributed social and cultural change primarily to developments in communication technology. This single-factor deterministic approach is succinctly summed up by Walter Ong's assertion: "Writing restructures consciousness" (Ong 1982, 77-113).

In contrast to these reductive positions, Thomas refers to comparative evidence showing that the arrival of writing was not always followed by a cultural shift towards rationality and analytical thinking (e.g. in Sparta, Tibet); then highlights the long period following the invention of the Greek alphabet during which orality predominated and co-existed with literacy, when writing was used in the service of orality, as a storage technology that aided the oral performance of poetry, until growing professionalism enhanced the status of writing in the 4th century (1992, 13-14); and lastly draws on G.E.R. Lloyd's *Magic, Reason and Experience* (1979), which argues that factors other than literacy also contributed to the Greek intellectual revolution, such as the practice of public debate, the ethos of competition, and the structure of the *polis* itself (Thomas 1992, 20). So, in contrast to the absolute image of literacy and single-factor technological determinism, Thomas adopts a more complex and fluid conception of literacy: rather than a catalyst with predictable consequences, the impact of writing depends on the structures and practices already present in the society in which it appears; and, in turn, these features of the society have an impact how the technology of writing itself develops (1992, 24-25).

In *Plato on Poetry* (1997), Murray took Thomas's critique of Havelock's account on board but essentially adopted the latter's interpretation of the *Republic*'s attack on poetry as forming the core arguments and discursive purpose of Plato's text. Firstly, Murray identifies a consistent position on poetry running through *Ion*, *Republic* and *Laws* which degrades the epistemic status of poets and rhapsodes, characterizes poetry as a dangerous and corrupting influence on society, and insists on philosophy's control over poetry and the poets, which is to be implemented through censorship and/or banishment. Thus, in contrast to the traditional treatment of the *Republic*'s Book 10 as an inconsistent appendix, Murray reads Books 2 and 3 as preparation for "the final assault on poetry in book 10" (1997, 22). Secondly, Murray reaffirms Havelock's core thesis on what is fundamentally at stake in the *Republic*: "[Socrates'] emphasis on the triviality of poetry and his insistence on Homer's ignorance about all matters human and divine strike at the heart of Greek *paideia*. Homer, the educator of Greece, must be

banished in order to make way for a new system of *paideia* in which poetry will be replaced by philosophy" (1997, 22). At the end of the section 'Plato and Homer', Murray acknowledges Thomas's critique of Havelock's thesis, but aligns her reading with the latter's basic thrust:

> No doubt Havelock exaggerated his case in claiming that P. was at the centre of a revolution in communications, and that he was himself instrumental in bringing about a transition from an oral to a literate mentality in Greek society. Clearly the concepts of orality and literacy are more flexible, and the interplay between them more complex, than Havelock's analysis suggested.[54] Nevertheless it cannot be denied that P.'s attack on poetry represents a radical break with the past. Greece in many ways continued to be an oral society: historians, for example, regularly recited their works in public, and Greek social and political life was dominated by oratory, a performance art if ever there was one. But after the fifth century, despite the enormous popularity of drama, the performance of poetry was no longer at the centre of Greek culture as it had been in earlier times.
>
> [54] See Thomas (1992) passim, but especially 3-5, 17-28, 102-17
> (Murray 1997, 24)

Murray's position was consolidated and expanded by Susan B. Levin's meticulously argued *The Ancient Quarrel between Philosophy and Poetry Revisited* (2001). Levin focused on the concept of *technē,* and the epistemological status assigned to various practices in in *Gorgias*, *Cratylus*, *Ion* and *Republic*, to argue that Plato's conceptual threads are woven together to form a sustained and systematic critique of poetry. Following Gould (1990), and Murray's Havelock-inspired position, Levin frames Plato's attacks on Homer and the poets as part of a broader assault on tradition, which is ultimately aimed at supplanting poetry and installing philosophy as "the educator of Greece" (Levin 2001, 129). On this reading, the Theory of Forms and related doctrines, such as the Divided Line and the Allegory of the Cave, which appear in between the attacks on poetry in Books 2 and 10, were specifically constructed to counter the authority of poetry and the poets in Greek society.

For Levin, the *technē* framework plays a pivotal role in Plato's critique: the criteria for *technai* established in the *Gorgias*, namely goodness, knowledge and subject-matter, are identified as shaping the distinctions that Socrates makes between poetry, sophistry and true philosophy throughout the *Republic*. Thus, according to Levin, while poetry and the false wisdom of the sophists cannot be classed as *technai*, *philosophia* is placed "at the top of the hierarchy of *technai*", as the *technē* par excellence (2001, 135). The fundamental point of the

Republic Book 6 (493) is to link the sophists and the poets in terms of their destructive impact of society (lack of goodness), their low level of cognition (opinion, *eikasia*), and their low-level subject matter: *semblances* of virtue and wisdom (2001, 133-35). In contrast, true *philosophia* fulfils all the criteria of *technai*: a positive impact on society (if philosophers ruled), knowledge of the Good and the intelligible world of being, and the subject matter of the Forms (2001,140).

The *technē* framework rigorously excludes poets from the possibility of attaining true knowledge and subordinates their production to the control of the philosophers: if poets did have real knowledge of virtue and vice, they would actually be philosophers. However, the necessity of the division of labour established in Book 2 ("the Principle of Specialization" (Levin 2001, 148)) entails that philosophers will not be tasked with writing the kind of poetry that will be acceptable in the ideal *polis*: carpenters or bed-makers will make beds, poets will write poetry. In contrast to Annas' charge that Plato's attacks of poetry in Books 2 and 10 are inconsistent and weak, particularly when the concept of *mīmēsis* comes into play, Levin highlights the threads of Plato's text that specify the role of poetry and *mīmēsis* in the ideal *polis*: poets will have true, stable beliefs (*orthē doxa*) inculcated by the new *paideia*, and will assist the philosophers by providing desirable role models for young children before they are able to form their own judgments concerning the Good, and by writing poems for important social occasions that contain *mīmēsis* of reasonable and moderate conduct, which will unify the community (Levin 2001, 153,158).

In her complex critique of previous scholarship, Levin returns to Nettleship's acknowledgement of the consistency between the epistemological distinctions presented in Book 6 and status assigned to the poets' knowledge in Book 10 (Nettleship 1897 [1951], 347), i.e. *eikasia*, but extends the scope of this consistency to Book 7's Allegory of the Cave to align this representation of epistemological deception with Plato's thoroughly pessimistic view of typical human cognition (Levin 2001, 156). Thus, at the point where Nettleship and Annas introduce their own judgments to suppress the unpalatable aspects of Plato's critique of poetry, Levin does not flinch in her description: the fundamental purpose of Plato's epistemological, ontological and ethical frameworks is to reduce poetry to the supervised production of stories for early childhood and special state-organized civic occasions. Such a power grab would give philosophy absolute control over the field of cultural production and enculturation: "by functioning as the community's ultimate authority regarding the content and form of admissible constructions, philosophy clearly supersedes poetry as the educator of Greece" (Levin 2001, 166).

4.2.2 Strategic Consistency in Plato's Critique of Cultural Practices

Ion and *Phaedrus*: exclusion, homogenization and assimilation

Interpretations that focus on Plato's texts in isolation from their cultural context tend to neglect their communicative purpose, and to suppress consideration of how they interacted with and were shaped by this context. Focusing exclusively on the *logical-conceptual consistency* of Plato's arguments from within the interior of his texts obscures the *strategic consistency* in his engagement with rival thought styles and discourses, and overlooks his attacks on the cultural practices they maintain and promote.

For example, Annas (1981, 342) argues that Plato's true views on poetry can be found in the *Ion* and *Phaedrus*. Yet the strategies deployed in these texts are entirely consistent with the most extreme attacks on Homer and the poets in the *Republic*. In the *Ion* Socrates challenges the epistemic authority of rhapsodes by denying their practice the status of a craft or skill (*technē*) and demonstrating their lack of knowledge (*epistēmē*) (537c-538a). Socrates also indirectly challenges Homer's epistemic authority, by questioning whether Ion has the necessary knowledge to judge Homer's knowledge (e.g., of chariot driving (536e-537e). Since Socrates defines *technē* as the ability to know some particular occupation (537c), the implication is that if Homer does not have knowledge of chariot driving, his poetry is not a *technē*.

Furthermore, Socrates' interrogation of Ion is not restricted to challenging the status of rhapsodes and poetry: it also questions the practice of public poetry recital, by focusing on how rhapsodes affect their spectators. The practice of recital is described as a chain of collective derangement or possession: the poet is possessed by gods and divine things, the rhapsode is possessed by Homer, the spectators by the rhapsode (535a-536d). Thus, if the *Ion* does indeed reveal Plato's true views on poetry, the core arguments of the text suggest that poems are textual products lacking genuine knowledge, and that recitals exert a questionable or malign influence on the spectating public.

The notion that Plato assigns poets a positive status or role through acknowledging their divine inspiration ignores that this concession comes bundled with two strategic attachments: the exclusion of poetry from the status of *technē* and *epistēmē*, and the taint of possession or madness ("are you then in your right mind, or outside yourself?" (535c) (Allen 1996, 15). As

Murray notes, the *Ion*'s characterization of the poet, the rhapsode and the audience as divinely possessed also serves to position these participants of poetic recitals as "devoid of reason" and emphasizes the "irrational nature of the poetic process" (1997, 8-9). It is precisely the charge that poetry "impairs reason" and "indulges the irrational nature" that leads to the poet's banishment from the ideal *polis* in Book 10 of the *Republic* (605-608).

In the *Phaedrus*, the strategies that Plato deploys to tackle poetry are more complex and ambiguous, particularly when the issue of madness and divine inspiration is raised (244a-245c); it is nevertheless possible to identify specific strategies used to deal with rival thought styles and discursive practices that are consistent with those deployed in the *Ion*, the *Gorgias* and the *Republic*.

The *Phaedrus* covers such a wide range of issues that its thematic unity has been called into question and subjected to rigorous debate (e.g., (Heath 1989) (Rowe 1989)), but it can be safely argued that the *Phaedrus* is, like the closely related *Gorgias*, fundamentally concerned with *the best way of life* and thus with the choices that have to be made between the different practices that one can engage in. Since the *Phaedrus* ultimately argues that the philosophical way of life is superior to a life focused on other pursuits (e.g. speaking and acting in the world of men (*Phaedrus* 273 e)), Heath's conclusion is convincing: "The dialogue, therefore, is not about love, or about rhetoric, or about both love and rhetoric, as such, but about philosophy—which, for Plato, happens to be a matter of love and discourse" (Heath 1989, 170).

The fundamental issue addressed in both the *Gorgias* and *Phaedrus* is *what one does*, and *what one does with one's life* (with the 'one' in question obviously restricted to male citizens/aristocrats). While the *Gorgias* takes aim at the practices of public speaking and political involvement, the *Phaedrus* can be boiled down to the question of *education*: whether the soul should be *persuaded* by the public speech of oratory or *educated* by the private conversation of philosophy (277c). In both dialogues, the elevation of philosophy as the best way of life and best educator is achieved by downgrading the status of other practices and attacking other uses of spoken and written words (oratory, sophistry, poetry).

In the *Phaedrus*, poetry is—as in the *Ion*—associated with madness and divine possession. The theme of madness—*maníē* (μανία)—appears in Socrates' first speech in response to Phaedrus' recitation of Lysias' written speech. After invoking the Muses and defining love as what happens when irrational desire—and thus the pursuit of pleasure and physical beauty—gain the upper hand over thought and self-control, Socrates breaks off to ask "Anyway, my dear Phaedrus, do you think I've been inspired by a god? I do" (238c) (Waterfield 2002, 18). Before continuing, he attributes his inspiration to the bucolic setting and warns

Phaedrus "so don't be surprised if, as may happen, I become possessed by the Nymphs as my speech progresses. As it is I'm already more or less chanting dithyrambs" (238d) (Waterfield 2002, 18). Thus Socrates playfully (and flirtatiously) signals that his speech is mimicking divine inspiration and poetic affectation. Socrates goes on to outline the course of a homoerotic love affair, in which the older lover starts off driven by obsession and compulsion, but then falls out of love, recovers his sanity, and flees from the beloved (240c-241b). Socrates' first speech ostensibly repeats the main conclusion of Lysias' speech, i.e., that it is better to gratify a non-lover than a lover, but really serves to introduce the theme of madness and loss of control, which is framed as a conflict between desire and reason, and thus to lay the ground for distinguishing philosophy from other thought styles and discursive practices.

Socrates' second speech, the famous palinode delivered in response to a reprimand from his "divine sign", begins with a reconception of madness as a divine gift and source of blessings, and then proceeds to distinguish four kinds of madness: the possession of prophecy (244a-b), the purificatory madness that provides relief from guilt (244d-e), the Muses' madness that possesses poets (245a), and the apparent madness of philosophers who recollect the beauty of the true reality (249c-e). The strategy from the *Ion* is redeployed: the acknowledgement that competent poetry is divinely inspired and "educates future generations by glorifying the countless deeds of the past" is accompanied by the more loaded suggestion that truly inspired poets compose in a frenzy—a sane poet cannot compete with "poetry composed by men who are mad" (245a) (Waterfield 2002, 27).

The charioteer allegory running through the palinode establishes an epistemic hierarchy that assigns a privileged status to philosophy. The region beyond heaven, full of true being, true knowledge and divine intelligence, is described as inaccessible to earthly poets (247c), since it is only visible to immortal souls without bodies. Needless to say, Socrates courageously attempts to describe it himself: it is a region full of fierce competition, where souls vie to see the plain of truth, with much pushing and trampling, hence some souls gain more access than others. Not surprisingly, it is the souls who see the most truth that "enter the seeds of men who will become philosophers, lovers of beauty, men of culture, men who are dedicated to love[23]" (248d) (Waterfield 2002, 31). Socrates enumerates eight groups of souls below the philosophers, hierarchically organized in accordance with how much truth they glimpsed:

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[23] Harold N. Fowler's translation of ἀνδρὸς γενησομένου φιλοσόφου ἢ φιλοκάλου ἢ μουσικοῦ τινος καὶ ἐρωτικοῦ: "the birth of a man who is to be a philosopher or a lover of beauty, or one of a musical or loving nature", accessed at http://www.perseus.tufts.edu/hopper/text?doc=urn:cts:greekLit:tlg0059.tlg012.perseus-eng1:248d

[…] the second group those of law-abiding kings or military commanders or civic leaders; the third group those of politicians, estate- managers or businessmen; the fourth group those of men who love exercising in a gymnasium or future experts in bodily health; the fifth group will live as prophets or as initiators into one of the mystery cults; the sixth group will most suitably live as poets or some other kind of representative artist, the seventh as artisans or farmers, the eighth as sophists or demagogues, and the ninth as tyrants (248c-d) (Waterfield 2002, 31-32).

Two points can be emphasized here. Firstly, grouping poets together with representative/imitative artists is fully consistent with the *mīmēsis* argument in Book 10 of the *Republic*. Secondly, it is no accident that poets are placed one rank above artisans and farmers, and two ranks above sophists.

As Ellen Meiksins Wood has argued, "the outright contempt for labour and labourers displayed by Plato and Xenophon" was a unique class prejudice, rather than a universal cultural norm: while disdain for *dependent* labour and slaves was the norm, Plato and Xenophon's contempt for manual workers set them against democracy and the "'banausic' multitude" (Wood 1989, 139).[24] The sophists are ranked even lower than craftsmen and other manual labourers, along with demagogues and just above tyrants, because they are identified and targeted as the chief rival and opponent of the new discourse of philosophy that is consistently and adversarially articulated across Plato's texts.

The text of the *Phaedrus* refers to and incorporates external texts, genres and discourses: the alien discourses of poetry and rhetoric are cited (sometimes verbatim), parodied and subjected to critique, but oblique reference is also made to Plato's own *Gorgias* and its account of *technē* (Heath 1989, 154-55). The genres of speech represented and addressed in the *Phaedrus* contrast with those depicted in the *Gorgias*: while the *Gorgias* ends in failure— dialogical breakdown with ominous overtones, the *Phaedrus* hints at what true philosophical discourse might look like.

Thus, although in the *Gorgias* Socrates successfully demolishes the claims of sophist oratory in a public debate involving many participants, downgrading *rhētorikós* from *technē* to mere flattery (*kolakía*—κολακεία), the dialogue ultimately ends as a monologue, with Socrates debating with himself and delivering a long, uninterrupted account (*logos*), despite his repeated insistence that Gorgias and Pollus engage with him through questioning and short answers, rather than extended refutations (449, 467, 474). Socrates' extended *logos* effectively silences

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[24] See also Nightingale 1995, 56).

Callicles, who has been steadfastly unpersuaded by dialogical browbeating, and who has insisted that Socrates' philosophical discourse will not protect him from those who will seek to put him to death (521-22). Socrates can thus be read as resorting to a 'true' account of the afterlife—a *logos* which is pointedly defined as *not* being *muthos* (523a), even though it features Cronus, Zeus, Prometheus, the Isles of the Blessed and Tartarus—in response to his failure to convince Callicles, who had brutally called into question the purpose and utility of philosophy in Athenian society. In fact, Socrates' focus on the judgment and punishments that await in the afterlife can be read as acknowledging that philosophy has no utility in the present society, that it is in fact an *anti-social* practice. At the end of the *Gorgias*, Callicles' charge from earlier in the dialogue, when he paraphrased Euripides' *Antiope*, are still all too relevant: "You couldn't put a speech together correctly before councils of justice or utter any plausible or persuasive sound" (485e-486a) (Zeyl 1986). Thus the question that lingers at the end of the *Gorgias* is what exactly is the "true political craft" and "true politics" that Socrates claims to practice? (521)—because it clearly cannot consist in the public articulation of a suppressive, silencing *monologos*.

By contrast, the *Phaedrus* provides a closer representation of what true philosophical discourse might look like: a *dialogos*—a dialectical exchange in which the speech techniques of poetry and rhetoric are appropriated to lead and educate a young man's soul. After Socrates' palinode has established the epistemic superiority of philosophers over poets, and that the philosophical life ensures both a better afterlife (the soul will regain its wings more quickly (249a)) and a harmonious life on earth (256a), the topic of the dialogue takes a reflexive turn to consider what makes speech and writing good or bad (259e). This analytical shift is the basis for arguing that the *Phaedrus* lacks fundamental unity and is "intolerably misshapen" (Rowe 1986), but as was mentioned previously, if, following Heath (1989), the fundamental focus of the text is taken to be the education of the soul, then the analysis of speech and writing in terms of their impact on the soul is *strategically consistent* with the palinode's assertion of philosophy's epistemic supremacy and claim to the best 'way of life', and is also fully aligned with the discursive strategies employed in Plato's other texts, such as *Charmides*, *Ion*, *Gorgias*, *Republic*, and *Sophist*. Three examples will serve to illustrate this strategic and discursive consistency.

1. **The incorporation of court procedure and technique**. Socrates' analysis of speech and writing in the *Phaedrus* is not focused on abstract forms of text production, but on specific social practices associated with particular Athenian institutions, such as the Council (258a) and the lawcourts (261a), and with the oratory of particular public figures, such as Pericles (269).

The first question addressed in Socrates and Phaedrus' analysis of what makes speech good is whether knowledge of the truth is required for the speaker to speak well, which reactivates the issue tackled in the *Gorgias*—of whether there is such a thing as an art or science (*technē*) of speaking. In the *Phaedrus*, while the *technē* of speaking is allowed to defend herself and claim that knowledge of the truth is necessary for persuasion, Socrates refers to certain pre-existing arguments (*logoi*): those that testify she is an art, and those that accuse her of lying, of being "an unsystematic knack (ἄτεχνος τριβή)" (260e) (Waterfield 2002, 48). It thus becomes clear that the *technē* of speaking is actually on trial, with the procedure resembling that of the Athenian courts: the defendant speaks for herself, arguments testify as witnesses for the defendant and are presented by the prosecutor. Phaedrus makes this explicit by suggesting they incorporate or imitate the procedure and techniques of the lawcourt: "We need these arguments, Socrates. Bring them here to take the stand, and cross-examine them to see what they are saying and how they put it" (261a) (Waterfield 2002, 48).[25]

The first point to make here is that this strategy of incorporating or parodying the legal procedure of public examination in a private conversation in which philosophers analyse a specific social practice is repeated in *Republic* Book 10, with the trial and banishment of poetry (*Republic* 605-07). The second point is that the incorporation of Athenian court procedure into the text of the *Phaedrus* is a perfect example of what Andrea Wilson Nightingale describes as Plato's engagement with "alien" *logoi*: a strategy that appropriates, parodies and exploits other discourses and genres to assert the claims of philosophy as a distinct, rival discourse (Wilson Nightingale 1995, 132)

2. **Homogenizing heterogeneous cultural practices**. When he begins the analysis of what makes good speech, Socrates' first move is to reduce heterogeneous phenomena to one common denominator:

> Wouldn't rhetoric, in general, be a kind of skilful leading of the soul by means of words, not only in public gatherings such as the lawcourts, but also in private meetings? Isn't it the same skill whether it is dealing with slight or great issues, and something which, seen aright, is no more valuable when it is concerned with important matters than it is when it is dealing with trivia? (261a) (Waterfield, *Phaedrus* 2002, 48).

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[25] For comparison, N. Fowler's (1925) translation opts for "examination" rather than "cross-examination", perhaps because the cross-examination of witnesses was not a part of Athenian court procedure: "Socrates: Yes, if the arguments that are coming against her testify that she is an art. For I seem, as it were, to hear some arguments approaching and protesting that she is lying and is not an art, but a craft devoid of art […]. Phaedrus: We have need of these arguments, Socrates. Bring them here and examine their words and their meaning. Accessed: http://data.perseus.org/citations/urn:cts:greekLit:tlg0059.tlg012.perseus-eng1:260e. On Athenian court procedure, see .

Thus various forms of public discourse that may differ greatly in terms of their form and communicative purpose, such as a speech given before the Athenian Assembly or a litigant's speech given before a court, are reduced to the characteristic of seeking to persuade the audience; and any differences between public and private discourse, or between weighty deliberation and casual conversation, are also eliminated when Socrates gathers disparate forms and contexts of spoken discourse together under the single class of rhetoric (i.e. speech aimed at persuasion).

Socrates subsequently describes this homogenizing technique as the principle of "collection"—bringing scattered particulars under a single class (265d), which, along with the complementary principle of "division"—cutting things up according to their natural joints, is a practice that distinguishes those who Socrates describes as "dialecticians" (διαλεκτικούς) (266b) (Waterfield 2002, 55-56).[26] As Heath stresses (1989, 156), these principles of dialectic do not exhaust the practice of philosophy: Socrates reveals that he had used the principle of division in his 'poetic' speeches when analysing the different forms of madness (266a), and he later asserts that good rhetoricians will make use of the techniques of collection and division when tailoring their speeches to the souls of their audience (272a, 273e). Thus both rhetoric and philosophy are discursive practices that have to use dialectical collection and division in the fulfilment of their distinct purposes. Heath suggests that the final cut that divides rhetoric from philosophy is Socrates' distinction between persuasion and teaching: the conventional (i.e., non-*technē*) practice of rhetoric persuades without systematic knowledge, while the true practice of rhetoric that persuades with systematic knowledge ultimately dissolves into philosophy, which seeks to educate rather than merely persuade (Heath 1989, 158).

The first point to make here is that the discursive strategy of homogenizing (collecting) diverse cultural practices and forms of cultural production and reducing them to one defining characteristic is replicated in *Republic* Books 2 and 10, where diverse text types are reduced to the production of *pseudos* (ψεῦδος)—fables/fiction/falsehood, and to *mīmēsis* (μίμησις)—imitation/representation, respectively; and in the *Gorgias*, where the practices of cooking and rhetoric are reduced to *kolakeia*—pandering or flattery. Secondly, Plato's texts employ the strategy of dividing to distinguish between practices that are uncomfortably similar from the

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[26] N. Fowler's (1925) translation: "That of perceiving and bringing together in one idea the scattered particulars. […] That of dividing things again by classes, where the natural joints are, and not trying to break any part, after the manner of a bad carver. […] I have called them hitherto dialecticians" http://data.perseus.org/citations/urn:cts:greekLit:tlg0059.tlg012.perseus-eng1:265d

perspective of Plato's project of articulating *philosophia* as a hegemonic, master discourse. Thus Plato's philosophy—which reaches for *muthos* and *poiesis* in moments of need, when rational analysis and *logos* are insufficient, and which represents men speaking in a range of private and public situations—had to be distinguished in its form and content from the ostensibly similar practices of poetry recital and public oratory. Lastly, in Plato's texts the strategies of homogenizing (collecting) and distinguishing (dividing) are frequently deployed alongside the strategy of evaluating cultural practices and forms of production with epistemic criteria in order to delegitimize, assimilate and control them—the strategy covered in the next section.

3. **The delegitimization, assimilation and control of traditional and rival practices**. The narrower definition of rhetoric provided in the *Gorgias* (454-459), i.e., persuasion concerning matters that are just and unjust, excludes rhetoric from the status of *technē* with the knowledge criterion: the orator only provides conviction/belief (*pistis*) without knowledge (*epistēmē*) of this subject matter (454c-e).[27] This criterion assigns the practice of rhetoric the status of producing conviction-persuasion in the law courts and public gatherings, rather than teaching-persuasion or true instruction (Lamb 1967) (Zeyl 1986). The knowledge criterion also comes into play in the *Phaedrus*, but the broader definition of rhetoric as a kind of leading the soul by means of words (261a) entails that considerations as to whether speaking can be classed as a *technē* need to cover *all* kinds of persuasive speaking (261d-e)—not just serious public speaking in the lawcourts and political arena, but also private conversations focused on persuasion, even trivial ones. The knowledge criterion is introduced when Socrates considers the practice of making opposing speeches in the lawcourts and the political arena: speakers can only lead listeners deceptively across similar views and get them to change positions if they are acquainted with the truth of the matter (262b). But the critical moment comes with the shift of focus from knowledge of the subject matter to knowledge of the listener's soul: an expert practitioner of the art of speaking would proceed in a scientific manner and focus all his efforts on the soul (271a). In other words, an expert/true rhetorician would apply the dialectical principles of collection and division to different kinds of speech and souls, a practice which clearly requires the use of systematic knowledge:

> once he has classified the types of speech and of soul, and the ways in which the various types
> of soul are acted upon, he will go through all the causes, fitting each type of speech to each

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[27] For a more detailed discussion of the criteria that distinguish between *technai* and pseudo-*technai*, see (Levin 2001, 82-84).

type of soul and explaining what it is about the nature of particular kinds of soul which makes them inevitably either persuaded or unpersuaded by speeches of a particular kind (271b) (Waterfield 2002, 63).

Such experts are rare, however. When Socrates surveys contemporary practitioners and the current state of rhetoric in Athens, he finds no evidence of systematic knowledge: the writers of rhetorical manuals are scoundrels who hide their knowledge of the soul (271c), and in the lawcourts orators aim for persuasive probability (*eikós*) rather than truth (272d-e). Yet the current state of affairs does not rule out the possibility of a rhetorician using systematic knowledge to persuade his listeners, or of a master using systematic knowledge to teach pupils how to persuade. However, at the point where rhetoric becomes a *technē* it also becomes philosophical, but a wise man/man of sound mind (*sṓphrōn*) would not invest all his energy in public speaking (273e) and mere persuasion.

The subsequent, famous analysis of writing leads to the conclusion that the written representation of philosophical speech can at best provide a reminder of genuine, serious philosophy—a practice that uses the spoken words of private conversation "for explanation and teaching" (278a). Heath highlights the paradoxical position that Plato's text wrestles rhetoric into: "So if conventional rhetoric does not become philosophical it is not a *technē* and cannot achieve its ends systematically; but if it does become philosophical it no longer wishes to achieve those ends. Either it dissolves itself, or it remains unfulfilled" (Heath 1989, 158). Thus, ultimately, rhetoric is pinned down as a cultural practice that is either excluded from the status of *technē*—insofar as it focused on persuading the public and inculcating beliefs, or is assimilated to the supreme *technē*—the practice of philosophy, focused on educating souls in private conversation.

Once again, like the strategy of homogenization, the strategies of epistemic exclusion and genre assimilation applied to rhetoric are fully consistent with the *Republic*'s treatment of poetry. As was mentioned in the previous section, Levin highlighted how the epistemological and ontological architecture erected in Books 6 and 7 of the *Republic* serves to exclude poetry from knowledge (and thus denying this cultural practice the status of *technē*): "If poets actually did have knowledge of virtue and vice, hence qualifying as *technē* practitioners, they would be none other than philosophers" (Levin 2001, 148). In the *Republic*, the strategies of epistemic exclusion and genre assimilation are taken a step further, with the banishment of poetry from the *polis*, unless the productions of this genre meets the strict approval of the philosopher-rulers: the pincer move of exclusion or assimilation ultimately serves to bring other modes of cultural

production—practices, discourses, genres and text types—under the control of the master *technē*: philosophy.

Charmides: a preliminary attempt at the supervision and control over cultural practices

The *Republic*'s multi-layered justification for philosophy's control over all forms of cultural production is prefigured in the more hesitant probing of Plato's *Charmides*. This section will outline the main points of strategic consistency between these two texts, consider recent analyses of academic philosophy, and attempt to make the case for a broader, Fleck-inspired contextualization of the *Charmides*, which will be attempted in the next section.

In the *Charmides*, Socrates, just returned from the Battle of Potidaea (432 BC), discusses the virtue *sophrosyne* (σωφροσύνη)—translated as "temperance" (Lamb 1927) (Sprague 1992), but also as "moderation" and "sound-mindedness" (Tuozzo 2011)—with two scions of ancient Athenian families: the mature Critias and the youth Charmides. At the time when Plato was writing (c. 399-390), these two individuals were infamous for their roles in the oligarchic coup of 404-3: they had both died in the battles associated with Thrasybulus' restoration of the democracy, and Critias in particular was in the process of being discursively villainised—for example in Xenophon's *Hellenica* (2.3), written c. 393-380 (Brownson 1961, ix)—as the leader of "the Thirty Tyrants" who had ruled Athens with a reign of murder and rapacious appropriation. The fact that Critias and Charmides were also Plato's maternal great-uncle and uncle, respectively, is not without significance for the position that Plato's text occupies in the broader field of cultural production.

Plato's textual markers emphatically insert the *Charmides* into a contested field of symbolic representation and intense, ongoing antagonism—involving the following: the disastrous Peloponnesian War (431-404), which some of the Athenian elite clearly blamed on the radical democracy; oligarchic opposition to the *demokratia*, which can be traced through texts from the 420s through to Thucydides' account of the oligarchic coup of the Four Hundred in 411; the perilous situation after the Peloponnesian War, which saw Athens lose its empire and fall from its position of Aegean hegemon—a political, economic and imperial superpower with unparalleled wealth and resources—to a severely weakened subject of Spartan hegemony that had been ravaged, impoverished and depopulated by plague and war, and had only narrowly escaped complete annihilation at the hands of the Peloponnesian allies;[28] the oligarchs' pro-

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[28] "When they arrived, the ephors called an assembly, at which the Corinthians and Thebans in particular, though many other Greeks agreed with them, opposed making a treaty with the Athenians and favoured destroying their city." (Xen. *Hellenica*. II. 2.17-22) (Brownson 1961, 111)

Spartan seizure of power in 404-3, which, in addition to murdering leading democrats and moderates, launched an attack on the institutions of democracy and attempted "to efface the democratic culture deeply embedded within the various religious, social, and political institutions of Athens" (Wolpert 2002, 23); the subsequent civil war (404); and, lastly, the restoration of the democracy, which led to discursive counter measures (e.g. legal reforms, writing up the ancestral laws) and an atmosphere that ultimately made the execution of Socrates in 399 possible (Wolpert 2002, 37-8, 63-5).

In other words, Plato's *Charmides* was just one salvo in an ongoing culture war: it articulated a complex and deliberately ambiguous position in a multi-layered discursive struggle that can be traced back through the previous decades. Hence this context would seem to be an ideal testing ground for the application of Fleck's concepts of "intellectual unrest", "collective mood", "the circulation of ideas", "proto-ideas" and "comparative epistemology".

To begin with, Plato's choice of the virtue *sophrosyne* is far from a neutral subject for discussion: it was an ancient aristocratic virtue that had become associated with Spartan self-discipline (Thuc. 1.68.2) while its opposite, *akolasia* (indiscipline), was associated with the excesses of the radical democracy (exemplified in Alcibiades' address to the Spartans (Thuc. 6.89.5)) (Powell 1988, 87). Thucydides has Peisander, one of the instigators of the 411 oligarchic coup of the Four Hundred, declare that the Athenians would not be able to save the city without "adopting a more σώφρων [prudent] government and putting the offices to a greater extent into the hands of a few" (8.53.3) (Tuozzo 2011, 94).[29] Thus, as Thomas M. Tuozzo highlights, during the Peloponnesian War, Athenian oligarchic circles came to use *sophrosyne* (σωφροσύνη) as a term "to describe their own political program" (2011, 94). Bearing in mind that Athenian citizens were highly sensitive to the negative connotations of the term "*oligarchia*", since it was associated with schemes for the potential return of the treacherous Alcibiades, the use of *sophrosyne* and its cognates functioned as a more palatable slogan or codeword. [30]

Thus, *sophrosyne* can be identified as a Fleckian proto-idea (Fleck 1935a [1979], 23): a concept which by the 420s still retained its core meaning (discipline, restraint) but which was undergoing a process of differentiation and acquiring new meanings due to its circulation

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[29] Cf. Mynott: "This is not going to happen unless we govern ourselves more prudently and restrict office to fewer people than now, […]" (2013, 542).

[30] Raphael Sealey drew attention to Thucydides' use of *oligarchia* as a narrator, but the advocates' avoidance of this term, and their preference for terms like 'sophron' and not having demokratia (Sealey 1973, 277-80).

among an Athenian thought collective which actively adapted the idea to its present circumstances.

When Socrates presses Charmides to define *sophrosyne* at the start of the investigation, the initial definitions that he supplies (doing things in an orderly and quiet way (159b); modesty (160e)) derive from the long-established aristocratic value system, but his third definition, which he apparently heard from Critias, i.e., "minding one's own business" (161b) (*to ta heautou prattein* – literally "to do the things of oneself" (Sprague 1992, 70, footnote 33), or "doing one's own things" (Tuozzo 2013, 66)), was associated with more recent modifications and connotations. This shift of meaning entails a shift in interlocutor: from now on, Socrates will examine the meaning and functions of *sophrosyne* with Critias.

Tuozzo reconstructs the range of meaning associated with *sophrosyne* defined as doing one's own things: "σωφροσύνη in this sense involves refraining from transgressing social norms constitutive of one's social position and, in particular, from transgressions that would infringe on the prerogatives of another" (2011, 91). Since different people and social groups occupied different social positions, the appropriate temperance or prudence expected from them varied: "For elites, σωφροσύνη consists in refraining from abusing their power for their own profit; for common citizens, it consists in submitting to the rule of their betters" (2011, 94). Crucially, the concept of *sophrosyne* as "minding one's own business" applied from the level of the individual to the level of the polis: "the term also had a use in discussions of foreign policy, to describe the nonimperialistic, noninterfering foreign policy associated with Sparta" (2011, 94). In other words, the Athenian Empire, which was characterized as violating established Hellenic social norms by subjugating and enslaving rebellious subject-allies (Thuc. 1.97.4), and which encroached on the territories and alliances of the Peloponnesian city-states, did the exact opposite of mind its own business: it was unrestrained and undisciplined, and upset the peace and calmness (ἡσυχιότης) associated with Spartan discipline.

Socrates' response to the notion of *sophrosyne* as minding one's own business prefigures three elements that reappear in the *Republic*: need as the founding principle of the *polis* (*Rep.* 369b), the resulting division of labour (*Rep.* 369d-374e), and the concern with the control and supervision of cultural production that runs throughout Plato's masterpiece. In *Charmides*, Socrates makes an abrupt transition from the notion of *not* doing other people's business (161e) to the concept of the division of labour and the issue of a well-governed city in order to highlight the problematic implications of Critias' conception of *sophrosyne*:

"Well then," I said, "do you think a city would be well governed by a law commanding each man to weave and wash his own cloak, make his own shoes [sandals] and oil flask and scraper, and perform everything else by this same principle of keeping his hands off of other people's things and making and doing his own?"

"No, I don't think it would," he said.

"But," said I, "if a city is going to be temperately governed, it must be governed well."

"Of course," he said.

"Then if temperance is 'minding your own business', it can't be minding things of this sort and in this fashion." (161e-162a) (Sprague 1992, 71)

In other words, a well-governed polis requires people to do other people's business, at least in the sense of producing material goods, so the virtue of *sophrosyne* cannot be a norm applicable to each man. By implication, Socrates has drawn attention to the tension between the aristocratic notion that people should not transgress the norms constitutive of their social position and the concept of a democratic *polis* wherein the law applies equally to all men.

This provocation prompts Critias to take over from Charmides, and the first tussle between Socrates and Critias concerns the latter's distinctions between doing (πράττειν – *prattein*), working (ἐργάζεσθαι – *ergazesthai*) and making (ποιεῖν – *poiein*). According to Rosamund Kent Sprague's reading, Critias is prepared to allow that people who *do* other people's business are temperate (*sophron*), but cannot accept that people who *make* other people's things are temperate (163a) (Sprague 1992, 73). By means of this distinction, and drawing on the authority of Hesiod, Critias hopes to exclude specific modes of production and forms of labour from the sphere of *sophrosyne*:

No, I don't, he said; neither do I call working (ἐργάζεσθαι) and making (ποιεῖν) the same thing. I have learned this from Hesiod, who said that work (ἔργον) is no disgrace. Now do you think that, if he called things such as those you just now mentioned works (ἔργα) and working (ἐργάζεσθαι) and doing (πράττειν), he would say that it is not a disgrace for anyone to make sandals or sell salt-fish or work in a brothel? You mustn't think so, Socrates, but he in fact, I think, considered a making (ποίησιν) to be something other than a doing (πράξεως) and working (ἐργασίας), and that what is made (ποίημα) is sometimes a disgrace, when it is not accompanied by the noble (μετὰ τοῦ καλοῦ), but that no work (ἔργον) is ever a disgrace. For he called things that are made nobly (καλῶς) and beneficially (ὠφελίμως) works (ἔργα), and such makings he called workings (ἐργασίας) and doings (πράξεις). And one must say that he considered only such things to be proper to one (οἰκεῖα), and all harmful (βλαβερά) things alien (ἀλλότρια); so

one must think that both Hesiod and anyone else who is wise (φρόνιμος) calls this person who does his own things temperate. (163b4–c8) (Tuozzo 2011, 176).

Although forms of craft production and labour are mentioned explicitly, Critias refrains from giving examples of things "made nobly and beneficially", Tuozzo suggests: "We may hazard a guess that Critias has in mind the activities proper to a well-born, wealthy gentleman, and in particular, political engagement. These are the things that are nobly done, and are far removed from the craft activity of those who must work for a living" (2011, 177).

It can thus be observed that Critias is represented as deploying the Socratic-Platonic strategy of exclusion identified in the previous section. However, while in the *Ion*, *Gorgias* and *Phaedrus* Socrates is shown using the strategy of making conceptual distinctions to exclude certain cultural practices (rhetoric, poetry recital, poetry) from the class of *technē*, Critias uses semantic distinctions to exclude certain social practices (the manual labour of sandal making, the selling of a fishmonger, providing sexual services) from the value associated with the virtue of *sophrosyne*. So, unlike the sophists depicted in other dialogues, whose practices bear the brunt of Socrates' exclusionary strategy, it becomes apparent that Plato is portraying Critias as more aligned with Socrates' practice of *philosophia*. His distinctions may be somewhat forced and clumsy, requiring prompting and guidance from Socrates—Critias is almost immediately made to abandon his distinctions and concur that he is really asserting temperance is doing good things (163e10-11)—but his method and concerns are far more "Socratic" than those of the long-winded or blustering sophists that Socrates ultimately humiliates and silences in other dialogues (e.g., Gorgias, Thrasymachus).

When considered in the light of Fleck's theory, these two elements—the focus on and concern with a range of practices (political engagement, productive crafts, prostitution) and the use of distinctions to assign a hierarchy of values (from noble to disgraceful) and enforce exclusion—suggest that Socrates and Critias share the same thought style, in the sense of "the problems of interest to the thought collective" and the "methods which it applies as a means of cognition" (Fleck 1935a [1979], 99). The subsequent conceptual steps of Plato's rigorously constructed dialogue provide further support for this reading.

First, Socrates introduces the issue of whether "temperate men can be ignorant of their temperance" (164a). Since Critias allows that certain craftsmen who *do* other people's business can be temperate (e.g., politically engaged noblemen, and probably doctors), Socrates suggests he must believe that it is also possible for them to not know they are temperate while doing this business. Socrates then takes a second step: *doing* other people's business can be beneficial or

harmful, but craftsmen do not always know whether they have acted beneficially or not,[31] therefore Critias must allow that a craftsman can act beneficially when doing other people's business without knowing it (164b-c).

Critias' response to these steps is to insist that *sophrosyne* necessarily entails knowledge, even at the cost of withdrawing his previous statements: "As a matter of fact, this is pretty much what I say temperance is, to know oneself, and I agree with the inscription to this effect set up at Delphi" (165d) (Sprague 1992, 76). Thus at this point the dialogue moves from the proto-idea of *sophrosyne* (sound-minded restraint, modesty), through Critias' reformulated conception of minding one's own business, to the epistemological terrain traditionally associated with Socrates and the Delphic inscription "Know thyself" (Phaedrus 229e).

The fact that it is Critias who introduces the definition of *sophrosyne* as self-knowledge has been construed differently. On the one hand, Laurence Lampert (2010, 185-92) reads it as marking a break between Critias and Socrates, since Critias assumes that he is a knower and that he can use this definition as a basis for knowing and ruling other knowledges, while Socrates—of course—only knows that he does not know, and thus will ultimately refrain from claiming knowledge of all knowledges. Furthermore, for Lampert, Critias' willingness to abandon his previous definitions reveals that he is no philosopher: he is an opportunist who uses truths to further his own agenda.

On the other hand, Tuozzo suggests that Plato was sympathetic towards the aristocratic tradition of pro-oligarchic thinking that Critias represented, and hence that Plato depicts Critias as a serious thinker who makes fruitful contributions to the dialogue and demonstrates "relative philosophical and dialectical sophistication" (2011, 66, 70, 177). On Tuozzo's reading, by allowing Critias to make an extended speech on the Delphic inscriptions, which asserts that "'know thyself' and 'be temperate' are the same" (164c165c) (Sprague 1992, 76), Plato makes a clear reference to Critias' poetry, which associated the Delphic recommendation of moderation with Spartan values (Tuozzo 2011, 75). Moreover, for Tuozzo, Critias' speech revives the divine aspects of the concept of *sophrosyne* hinted at previously (e.g., in Socrates' account of Zalmoxis, the necessity of curing the soul, and the soul's acquisition of *sophrosyne* (156d-157a)) and emphasizes how unique this value is: "one that both is central to human social life and links human beings with the gods" (2011, 188).

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[31] On the issue of whether Socrates can be interpreted as meaning that crafts are other- or self-benefiting, see Tuozzo (2011, 181-3), who concludes that "only a self-benefiting interpretation does justice to the letter of the text" (183).

The reference to the Delphic inscriptions and the identification of *sophrosyne* with self-knowledge marks a substantive and thematic shift in the dialogue. Socrates' response to Critias' third definition is to infer that "if sophrosyne is knowing [*gignôskein*] something, it is clear that it would be a kind of knowledge [*epistêmê*] and of something, wouldn't it?" (165c4-5) (Lampert 2010, 77). Henceforth the conversation is focused on the status of *sophrosyne* as a knowledge/science, which entails considering this knowledge reflexively—how a knowledge can know itself as knowledge, its relation to the knowledges involved in various *technai*, and ultimately its relation to the knowledge/science of the good and bad. Since the *Charmides* is one of Plato's aporetic dialogues, in this case ending with an explicit acknowledgement of failure (175a-e), the dialogue can be read as raising issues that are eventually solved more satisfactorily in the *Republic* (e.g., see (Lampert 2010, 169) and (Tuozzo 2013, 313-4)).

Thus, just as the setting of the *Charmides* steps back to the outbreak of the Peloponnesian War in 432-1, while the characters of Critias and Charmides point forward to the oligarchic coup of 404-3, and even to Socrates' execution in 399, the dialogue similarly steps back through the conceptual field to trace the development of the idea of *sophrosyne*—from ancient notions, through Critias' modification, to Socrates' epistemological and moral additions, but it also points forward to developments in the field of *philosophia* that are yet to come (e.g., Socrates' reference to the great man who is needed (169a)).[32]

Once *sophrosyne* is redefined as a knowledge/science (*epistēmē*)(165c), the first issue to be addressed is what this knowledge produces (165e). Critias insists that *sophrosyne* is unlike other knowledges/sciences—such as the science of housebuilding, which produces houses; or the *technai* of geometry and calculation, which have an object distinct from themselves (they are 'of something' in Critias' formulation)—since *sophrosyne* "is the only science which is both of other sciences and of itself" (166c) (Sprague 1992, 79). Thus, rather than maintaining the definition of *sophrosyne* as the science of the self (*Know thyself*), it becomes a knowledge of itself as knowledge.[33] This reflexive twist enables Critias to bring all other *technai* and knowledge practices under the control of *sophrosyne*: if this knowledge knows itself as an *epistēmē*, it is in effect the knowledge of knowledge, the science of science.

Socrates adds yet another conceptual twist: if *sophrosyne* is the science of science, it could also be "a science of the absence of science" (166e). This would place the temperate man in a unique position in society:

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[32] Lampert even argues that the dramatic date of the *Republic* is just a few weeks after Charmides (2010, 169).
[33] Sprague describes this as Critias' "shift from knowledge of self (*heautou*) to knowledge of itself (*heautes*)" (1992, 79)

> Then only the temperate man will know himself? and will be able to examine what he knows
> and does not know, and in the same way he will be able to inspect other people to see when a
> man does in fact know what he knows and thinks he knows, and when again he does not know
> what he thinks he knows, and no one else will be able to do (167a) (Sprague 1992, 80).

Thus, despite being condemned to a strange reflexivity and producing nothing that has any obvious benefit, due to the unique nature of his knowledge, might not the temperate man be able to inspect other people's knowledge and "divide things and say that one is science and the other not?" (170a).

However, Socrates is acutely aware that the temperate man cannot lay claim to omniscient knowledge: when inspecting other people, the man possessing *sophrosyne* is not able to know *what* the other person knows; he can only claim to know *that* the other person knows or does not know something: "Nor, when another person claims to know something, will our friend be able to find out whether he knows what he says he knows or does not know it. But he will only know this much, it seems, that the man has some science; yes, but of what, temperance will fail to inform him" (170d) (Sprague 1992, 86-7). Tuozzo frames this as the difference between "a full-fledged knowledge of knowledge (knowing *what*)" and "a reduced knowledge of knowledge (knowing *that*)" (2013, 257-263). In other words, without being a doctor himself, a temperate man cannot know *what* a doctor knows, only *that* a doctor knows something/has some science.

In crucial passages, Socrates reveals what is really at stake in the definition of *sophrosyne* as the science of science: the true benefit of *sophrosyne*—as the ability to inspect and supervise other people's knowledge—is that it would also allow them to rule over these people and govern the *polis*:

> " […] Because if, as we assumed in the beginning, the temperate man knew what he knew
> and what he did not know (and that he knows the former but not the latter) and were able to
> investigate another man who was in the same situation, then it would be of the greatest benefit
> to us to be temperate. **Because those of us who had temperance would live lives free from
> error and so would all those who were under our rule**. Neither would we ourselves be
> attempting to do things we did not understand—rather we would find those who did
> understand and turn the matter over to them—**nor would we trust those over whom we
> ruled to do anything except what they would do correctly, and this would be that of
> which they possessed the science**. And thus, by means of temperance, **every household**

> **would be well run, and every city well-governed, and so in every case where temperance reigned**. And **with error rooted out and rightness in control**, men so circumstanced would necessarily fare admirably and well in all their doings and, faring well, they would be happy. Isn't this what we mean about temperance, Critias," I said, "when we say what a good thing it would be to know what one knows and what one does not know?" (171d-172a) (Sprague 88-89, emphasis added).

If such a supervisory science were possible, it would legitimise the division of labour, the necessity of which was signalled earlier (161e-162a), since the rulers would be able to recognize their own cognitive limitations and delegate tasks to those who have passed inspections to determine *that* they possess knowledge, and who could be trusted not to stray beyond their expertise. It is noteworthy that it is precisely during this fantasy of domination that Socrates introduces the very element that will ultimately threaten the whole argument and conception of *sophrosyne* as the ruling science of science: the claim that in a *polis* thus governed the people "would be happy". This element is also emphasized when Socrates provides further details on the benefits that would result from their epistemic supervision of specific crafts:

> "Listen then," I said, "to my dream, to see whether it comes through horn or through ivory. If temperance really ruled over us and were as we now define it, surely everything would be done according to science: **neither would anyone who says he is a pilot (but is not) deceive us, nor would any doctor or general or anyone else pretending to know what he does not know escape our notice**. This being the situation, wouldn't we have greater bodily health than we do now, and safety when we are in danger at sea or in battle, and **wouldn't we have dishes and all our clothes and shoes and things skill fully made for us, and many other things as well, because we would be employing true craftsmen**? […] I grant that the human race, if thus equipped, would act and live in a scientific way—because temperance, watching over it, would not allow the absence of science to creep in and become our accomplice. But whether acting scientifically would make us fare well and be happy, this we have yet to learn, my dear" (173a-d) (Sprague 2010, 88-9) (emphasis added).

These passages provide us with an uninhibited expression of a will to power: the articulation of the claim to have knowledge of knowledge is tightly intertwined with the articulation of the desire to rule over other knowledges and their uses. Plato's characters—acutely aware that they produce no goods of tangible value in a city entirely dependent on the crafts and professions involved in the import of commodities and production of goods—dream up ways of claiming the authority to supervise all professions and modes of production.

My argument is that in these passages Plato offers a clear representation of the concerns and longings that were articulated by a specific thought collective on the outbreak on the Peloponnesian War and in the following decades. Plato's focus on the concept of *sophrosyne* can be treated as a window onto the thought style of Athenian *aristoi* (or *oligoi*) who were dissatisfied with the governance and policies of the *demokratia*. In the 420s, their opposition to the radical democracy was initially restricted to purely articulatory practices, such the intrigues and sympotic texts read and discussed at the meetings of political clubs (*hetaireiai*) and sworn associations (*synōmosiai*) (Hornblower 2008, 916-20), but with the opportunities afforded by Athenian military disaster (411 BC) and ultimate defeat at the hands of Sparta (404 BC), this thought collective engaged in practices aimed at obliterating the democratic political culture, reorganizing the constitution, and returning Athens to its ancestral laws (*patrioi nomoi*) (Wolpert 2002).

Thus Plato's contemporary readers would have been all too aware that, about three decades after the fictional conversation presented in the Charmides, the real Critias tried to make the dream of ruling a reality, by seizing power with a group of oligarchs that sought "to remake Athens on the model of Sparta, or on the model of an idealized Sparta" (Krentz 1982, 64). In the last decades of the 5th century, the Spartan model of social organization, i.e., a narrow oligarchy based on agrarian production with a tightly-controlled slave population (*heílotes*), was discursively framed as the antithesis of the Athenian model, i.e., a direct democracy based on an aggressively expansionist empire (*arche*) with subjugated and exploited subject-allies. The Athenian shift from the traditional agrarian economy to a thassalocracy entailed a structural transformation in the modes of production that ultimately undermined Solon's hierarchy of property classes.

Athens' successful maritime strategy in the Persian Wars, the founding of the Delian League (477 BC) and the rise of "the radical democracy" (462 BC) are associated with the Athenian economy being increasingly oriented away from an agrarian economy based on small farms and dependent on the labour of the *zeugitae* (the hoplite rank) and slaves, to a maritime empire dependent on seaborne commerce for the import of corn and wheat, and on the tribute (*phoros*) collected from subject-allies. The sources of Athens' power—the control of trade routes, the ability to brutally suppress resistance, colonial settlements (kleroukhies), the imposition of Athenian coinage, a monetized economy based on the import of foodstuffs and the export of commodities and manufactured goods, the cultural capital accrued from public expenditure on architecture and theatre—were all ultimately based on the labour of the *thētes* (the lowest and poorest class) who manned the ships and were sent out as colonizers, and on

the prized craftsmanship of the metics (*metoikoi* – free Greek residents with noncitizen status) who were particularly associated with the port of Piraeus (Ste. Croix 1954; Meiggs 1972; Powell 1988; Kallet 2013).

The development of Piraeus as a military harbour and commercial port under the guidance of Themistocles (completed c. 471) had in effect created an alternative power centre outside of Athens proper which was associated with the metics and a proliferation of trades, as signalled by the disgruntled "Old Oligarch"[34] in 431-424: "the city needs metics because of the great number of their skills and the requirements of the fleet" ([Xen] *Ath. Pol.* 1.12) (Marr and Rhodes 2015, 41). The skilled labour involved in shipbuilding involved a plethora of other specialized crafts, such as timber wholesaler, woodcutter, saw maker, ropemaker, rope dealer sail stitcher, glue seller etc.; then a flourishing port required yet more specializations, such as stevedore, cartwright, basketmaker, net maker; and all these labourers had to be fed, clothed and provided with tools (Lewis 2021)[35]. According to Diodorus, who probably based his account on lost 4th-century sources, this growth of professions and professionalism was a direct result of Themistocles' encouragement: "He also persuaded the *demos* every year to construct twenty triremes as additions to the existing fleet and to make resident aliens and craftsmen tax free, the object being to bring crowds of immigrants into the city from every quarter, and thus provide manpower for a greater number of skilled occupations" (Diod. xi.43.3) (Green 2010, 50).

When viewed in this light, Critias' disdain for manual labour and his attempt to exclude certain professions from the virtue of *sophrosyne,* and Socrates' obsession with identifying true craftsmen and rooting out charlatans by means of the supervisory category of *epistēmē*, can be interpreted as Plato's representations of the reactionary responses of a specific group of aristocrats who lamented their loss of power and control over the productive forces in Athenian society. In the face of structural economic transformation and the accompanying social upheaval, with the Solonic hierarchy and traditional value system under immense pressure, a section of the elites came to articulate a set of highly critical positions with regard to various forms of production and the specialised practices associated with them.

Crucially, this criticism was also targeted at the leaders/statesmen that initiated and facilitated the economic transformation with specific policy decisions, and at the representatives

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[34] For the dating of the *Constitution of the Athenians* and the use of the name "the Old Oligarch" as opposed to Pseudo-Xenophon etc., see (Marr & Rhodes, 2015, 1-6).
[35] David M. Lewis' *Labour Specialization in the Athenian Economy: Occupational Hazards* contains an updated list of Athenian occupations with testimonia (2021, 158-167)

of the democratic consensus that supported and ostensibly benefited from these policies, or at least acquiesced with them. Thus Plato's dialogues can be read as historical-fictional representations of "intra-elite competition" (Ober 1989, 85). In a somewhat similar vein, Meiksins Wood argued that the "outright contempt for labour and labourers" displayed by Plato and Xenophon was also aimed at "the prevailing cultural ideal": "In other words, those who were most vociferous in their expressions of contempt for labour were clearly not *reflecting* but *attacking* the dominant world-view" (1989, 139). I would suggest, however, that Plato's complex representational strategies make it impossible to straightforwardly identify his texts with one specific discursive position. At most, the dialogues can be treated as reconstructing and representing a range of conflicting and differentially-defined positions.

Nevertheless, I also assert that representational consistencies within and across Plato's dialogues, as well as consistent positions articulated in the textual field outside of Plato's texts, and with which his texts interact, allow the identification of a specific aristocratic-oligarchic thought style that developed between 432 and 403. This thought style self-identified in opposition to the prevailing democratic consensus and other rival thought styles, such as those which came to be strategically conflated with the homogenizing designation "sophistry".

In *Plato's Charmides Positive Elenchus in a "Socratic" Dialogue*, Thomas M. Tuozzo analyses and rejects the ancient and modern depiction of Critias as a sophist and atheist. He suggests that this image of Critias, which persists in relatively recent Plato scholarship (e.g. Schmid 1998, Lampert 2010), is filtered through the hostile historiographic tradition of the 4th century BC, and is rooted in the criticism of Epicurus and the 2nd-century AD account of Philostratus (Tuozzo 2011, 59-79).

Since the phenomenon of recycling ancient representations without reflexive analysis and questioning can be construed as a clear-cut example of a modern or near-contemporary thought collective (Anglophone academic philosophers) uncritically applying the biased characterisations of earlier thought collectives, tracing the interactive transmission of these representations across centuries and millennia will both shed light on the perceptions of Plato's *Charmides* and further justify the application of Fleck's theory.

The transmission of Critias

Critias the tyrant

The first textual evidence for the vilification of Critias is found in Xenophon's *Hellenica*, written c. 393-380, which depicts Critias as the most tyrannical of the vicious and cynically self-interested Thirty Tyrants that seized power in 404-3. Xenophon's Critias is singled out as being uniquely eager to execute informers and enemies of the aristocracy, and while these vengeful actions are described as initially having the support of the Senate and the citizens (*Hell*. 2.3.12), Critias is then depicted as leading a killing spree that targeted personal enemies and—crucially, given the hostility to craftsmen that Plato's Critias expresses in the *Charmides*—the Athenian metics:

> And now, when this had been accomplished, thinking that they were at length free to do whatever they pleased, they put many people to death out of personal enmity, and many also for the sake of securing their property. One measure that they resolved upon, in order to get money to pay their guardsmen, was that each of their number should seize one of the aliens residing in the city, and that they should put these men to death and confiscate their property. (Hell. 2.3.21) (Brownson 1961, 123)

The centrepiece of Xenophon's account is the dramatic clash between Critias and Theramenes, who are positioned as symbolic representatives of extreme and moderate oligarchy, respectively. In contrast to Theramenes' position of pragmatic restraint (he describes the Thirty's executions as unjust, but also stresses their negative impact on public opinion and the danger of turning the metics against the government (2.3.40)), Critias is depicted as a pro-Spartan traitor and tyrant who has abandoned all restraint, who uses violence to subvert legal procedure (he "went out and ordered the men with the daggers to take their stand at the railing in plain sight of the Senate" (2.3.50) (Brownson 1961, 139-41). Thus, in Xenophon's symbolic representation Critias is pointedly cast as the exact opposite of the temperate man: it is Theramenes who embodies aristocratic *sophrosyne* as he argues the case for moderation and faces his execution with calm dignity (2.3.55).

In *The Athenian Constitution* written by Aristotle and/or his students, c. 332-322 (Rhodes 2002), Critias is not listed as one of the Thirty,[36] and although the text refers to Theramenes' opposition to the violent excesses of the Thirty, no mention is made of any public confrontation with Critias or of the latter's role in his execution (*Ath. Pol*. 34-38). The contrast with Critias' central role in Xenophon's dramatic re-enactment is stark, suggesting that this

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[36] For a detailed comparison of ancient accounts of the Thirty, see (Wolpert 2002).

absence could have been due to cultural pressure to erase Critias as a historical figure, or that Critias had been thoroughly expunged from the collective memory of Athenian citizens.[37]

Critias the atheist

In the Hellenistic period, Epicurus (341-270 BC) is credited with including Critias among the Greek atheists that he criticized in Book 12 of his lost work, *On Nature* (*Peri physeōs*). This criticism was probably based on Critias' *Sisyphus*, the surviving fragment of which has been traditionally interpreted as asserting that the gods were a human invention:

> […] it seems to me,
>
> that first a certain man, shrewd and wise in mind (σοφὸς γνώμην),
>
> invented fear of the gods for mortals, so that
>
> base men have some fear, even if
>
> they do or say or think a thing in secret. (Tuozzo 2011, 82)

According to Philodemus (Col. XVIII 518–33), Epicurus described Prodicus, Diagoras, Critias and others as raving lunatics and Bacchant revellers for eliminating the divine from existing things (Spinelli and Verde 2020). Interestingly, then, Epicurus—whose philosophy became associated with atheism in the 17th century, when the term "Epicurean" was used to exclude the certain philosophies from polite society and the universities (see Section 6.5.7 of this thesis)— seems to have been responsible for stigmatizing Critias with the charge of atheism.[38]

In mid-second century AD Sextus Empiricus consolidated the tradition of categorizing Critias as an atheist with his interpretation of Critias' *Sisyphus* fragment:

> And Critias, one of the Tyrants at Athens, seems to belong to the company of the atheists
> when he says that the ancient lawgivers invented God as a kind of overseer of the right and
> wrong actions of men, in order to make sure that nobody injured his neighbours privily
> through fear of vengeance at the hands of the Gods. (Ad. Math. 1.54) (Bury 1936, 29-31)

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[37] Tuozzo also adduces a passage from Aristotle's Rhetoric which indicates that Critias' deeds were not very well known: "But if you wish to praise Critias, narrative is necessary, for not many people know [what he did]" (Rhet. 1416b26–29) (Tuozzo 2011, 60). Tuozzo also cites Umberto Bultrighini's *Maledetta democrazia* as a key text for Critias' "virtual *damnatio memoriae*", but this text was not accessible at the time of writing.

[38] Emidio Spinelli and Francesco Verde analyze the *Epistles* and ancient sources to conclude that Epicurus was far from an atheist: his theory was "also a theological theory" in which the gods and the divine play key roles (2020).

Hence the main basis for Epicurus and Sextus Empiricus' categorizing Critias as an atheist is a fragment of a speech in a dramatic work, from the mouth of Sisyphus, a mythological figure renowned for his trickery. Tuozzo's subtle and convincing interpretation of this and other fragments suggests that Critias recognized most people need something more than law to deter them from wrongdoing, but this does not necessarily entail atheism: "The fact that the many need the fear of the gods to act in ways that are socially beneficial does not require that the gods be a mere fiction concocted for that purpose" (Tuozzo 2011, 85). A fragment from a dramatic work is clearly an insufficient basis for inferring the author's religious beliefs. What is evident is that, in the light of other surviving fragments, Critias considered the gods from the perspective of social utility, and in terms of different needs: the majority of people need the fear of the gods to supplement the coercive power of the law, whereas some aristocrats are capable of cultivating their characters (through internalizing values such as *sophrosyne*) to the point where they avoid injustice independently, without the fear of divine vengeance (Tuozzo 2011, 85-5).

Critias the sophist

In the Roman imperial period, Philostratus was able to comfortably add a third element to the discursive representation of Critias, namely his supposed sophistry. In the *Lives of the Sophists* (written 230-38 AD), Philostratus describes Critias as a pupil of Gorgias (along with Alcibiades, Thucydides and Pericles) (1.9.1), which initially justifies the subsequent use of the epithet 'sophist' at the beginning of a list of Critias' crimes:

> Critias the sophist, even though he did overthrow democratic government at Athens, was not thereby proved to be a bad man; for the democracy might well have been overthrown from within, since it had become so overbearing and insolent that it would not heed even those who governed according to the established laws. But seeing that he conspicuously sided with Sparta, and betrayed the holy places to the enemy; that he pulled down the walls by the agency of Lysander; that he deprived the Athenians whom he drove into exile of any place of refuge in Greece by proclaiming that Sparta would wage war on any that should harbour an Athenian exile; that in brutality and bloodthirstiness he surpassed even the Thirty; that he shared in the monstrous design of Sparta to make Attica look like a mere pasture for sheep by emptying her of her human herd; for all this I hold him to be the greatest criminal of all who are notorious for crime. (1.16.1) (Wright 1922, 45-7)

This passage clearly indicates that as the image of Critias was transmitted across six centuries, thought collectives interacted with the representations they received, actively emphasizing certain elements and articulating positions with regard to them. Thus Critias' attack on Athenian democracy is excusable for Philostratus' thought style, while his pro-Spartan treachery and his treatment of the Athenian people are singled out for the strongest condemnation.[39]

Philostratus' position as a Greek sophist living in Imperial Rome, and in close proximity to the imperial family, determines what he focuses on in his account of the Greek "sophists". At a time when the Roman Republic had been discursively positioned as a distant memory of civil strife followed by two centuries of stability under the *Pax Romana*, but also at a time when Imperial Rome was on the verge of a new period of civil strife in the "Crisis of the Third Century", Philostratus' *Lives of the Sophists* contains frustratingly little detail on the contribution of the 5th-century sophists to the deliberative practices of the Athenian democracy. Adam M. Kemezis points out that Philostratus' "very unusual sort of narrative history of the Greek people" attempts to present sophistic activity as a cultural movement and set of cultural practices that were entirely dependent on the creativity of unique individuals. Thus Philostratus suggests—provocatively, according to Kemezis—that the appearance of the sophistic art at certain times and locations "does not need to be related to any outside causal factors":

> Philostratus wants his readers to contemplate the idea of a narrative history of Greek culture independent of political circumstances, and at the same time to ask themselves whether such a history can be made to function, or whether political and dynastic changes really are the critical factors. (Kemezis 2014, 203)

Philostratus provides details that acknowledge 5th-century sophists were deeply involved in public life, and in political and religious controversies—there was a connection between Gorgias and Pericles (1.9.1), Pericles' had a great reputation as an orator due to his extempore eloquence (1. praef), Gorgias played a role in religious festivals and delivered orations on Greek reconciliation and unity (including at Athens) (1.6.2), the Athenians mistrusted the sophists and banned them from the lawcourts (1. praef), Protagoras was banished from Athens for heresy (1.10.0), and Antiphon and Critias betrayed the people of Athens in the coups of 411 and 404-

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[39] A similar emphasis is found in Philostratus' assessment of Antiphon, the orator who Thucydides describes as the brains behind the oligarchic coup of 411 (Thuc. 8.68). According to Philostratus, he was a bad man because: "He broke up the democracy ; he enslaved the Athenian people; he sided with Sparta, secretly at first, but openly later on ; and he let loose on the public life of Athens the mob of the Four Hundred Tyrants" (1.15) (Wright 1922, 41)

3 (1.15, 1.16)—but these circumstances are incidental to Philostratus' main concern, which is to offer an *internal* account of how "the sophistic art" developed and was transmitted through Greek communities across the centuries. In other words, those of Kendra Eshelmnan, Philostratus presents

> the circle of sophists as an almost incestuously self-contained, self-generating, self-regulating community. As he presents it, this community is constituted entirely from within, by the consensus of insiders whose insider status is confirmed in part by their assent to this same consensus, which is thus imagined as having an objective, self-evident reality independent of the negotiations by which it is created. (Eshelman 2008, 396)

For Philostratus, the sophistic art is defined as an overriding focus on eloquence, and particularly the ability to demonstrate "extempore eloquence" (1. praef). This definition is the key conceptual tool that Philostratus uses to distinguish between those who can be counted among the sophistic community, and those who cannot. Thus Critias, despite his treachery and heinous crimes, is included in the canon of the Old Sophistic by virtue of his style:

> As regards the style of his oratory, Critias abounded in brief and sententious sayings, and he was most skilful in the use of elevated language, but not of the dithyrambic sort, nor did he have recourse to words borrowed from poetry ; but his was the kind of elevated language that is composed of the most appropriate words and is not artificial. I observe, moreover, that he was a master of concise eloquence […] (1.16) (Wright 1922, 49-50)

In Philostratus' peculiar project, Critias' language sets him apart from ancient philosophers who were definitely not sophists, as well as from ancient philosophers who had a reputation for being sophists due to the ease and fluency with which they expounded their theories, but who were not in fact genuine sophists (1. praef, 1.8).

Bearing in mind the claims to self-knowledge and knowledge of knowledges that Plato's Critias articulates in the *Charmides*, one component of Philostratus' distinction between philosophy and the sophistic art is particularly relevant: philosophers "set snares for knowledge" and assert that they have "no sure knowledge", whereas "the sophist of the old school assumes a knowledge whereof he speaks" (1. praef) (Wright 1922, 5). This distinction, articulated as part of a revalorisation and recategorisation, rejects Plato's suppressive representation of the sophists, and his concomitant elevation of Socratic philosophy, to present an alternative, revisionist counter narrative. Philostratus downplays Socrates, and dismisses the

Socratic practice of laying traps for interlocutors while professing to lack certain knowledge, to reappraise the practice of speaking persuasively in public on a wide range of themes, in response to audience demand. This reappraisal also allows Philostratus to recover Antiphon and Critias from their 4th-century vilification and suppression.

Needless to say, despite Philostratus' attempt to present sophistic art as a cultural practice that was generated and sustained independently of cultural circumstances, his own project was deeply determined by his context. The fact that he was able to recover and reconfigure the history of the 5th-century sophists and re-evaluate their contributions with such evident comfort and ease is indicative of broader cultural shifts and changing social needs. As Kemezis points out, Philostratus' narrative fits into—but barely mentions—losses and transfers of hegemony: from Athens to Sparta, from Sparta to Macedonia, from Macedonia to Rome; and as an account of the cultural practices characteristic of a new periphery, i.e., the eastern, Greek territories of the Roman Empire, it revolves around "an inescapable center of imperial gravity" (Kemezis 2014, 198).

The Roman appropriation of Athenian philosophy, which was made possible by the physical transfer of Greek libraries and intellectual slave labour (scribes, grammarians, philosophers) to Rome in the 1st century BC, and Cicero's subsequent Roman version of Plato's philosophy, which emphasized the positive value of oratory (see Section 4.4.4), entailed that Philostratus' rehabilitation of the 5th-century sophists could rely on widespread knowledge of—and acceptance of—sophistic cultural practices.

However, a key component of Philostratus' project was the emphasis on sophistic art as a fundamentally Greek cultural practice. According Barbara Levick's study of the empress Julia Domna, Philostratus chronicled the resurgence of Greek sophistry that had begun in the Greek territories of the Roman Empire in the 1st century AD. Due to the extended period of the Augustan peace and renewed prosperity, the wealthy elite could afford to pay Greek sophists for training and lectures, and were able to devote the necessary time to learning the art of oratory, which was seen as having practical benefits for the governing of cities. Such was the cultural capital associated with these professional speakers and lecturers that distinguished families would have a resident sophist in the household. Talented sophists like Philostratus had access to regional and imperial courts, and thus exerted considerable influence on political life (Levick 2007, 108).

The criteria used to identify and rehabilitate the 5th-century sophists (the Old Sophistic) is thus determined by Philostratus' project of defining the canon of the Second Sophistic. Eshelman argues that Philostratus in effect created the Second Sophistic by simultaneously

defining and chronicling the canon, and established himself as the canonizing authority in the process. Since this canon is defined in highly partisan terms, Philostratus' narrative excluded other canons and networks, which have largely been effaced from the historical record (Eshelman 2008, 408).

Thus Philostratus' phrase "Critias the sophist [Κριτίας δὲ ὁ σοφιστὴς]" is determined by a complex interplay of cultural processes and transformations. Fleck's theory asserts that the members of a thought collective are only able to perceive something new and different if the thinking style is changed (e.g., due to intellectual unrest and changing moods) (Fleck 1935b [1979], 74-5). Thus, due to the Ciceronian revaluation of oratory and the resurgence of Greek sophistry in the eastern territories of the Roman Empire—cultural developments shaped by numerous factors, such as political crises, transfers of hegemony, imperial conquest and appropriation, the reassertion Greek identity at the periphery, Philostratus was able to recover the figure of Critias from the discursive suppression of the 4th-century historiographical tradition and bring to light aspects of his writing that had long passed out of view, namely his eloquent style.

Philostratus' revisionist reconstruction of the canon of the Old Sophistic can thus be construed as the articulation of a thought style that defined itself in explicit opposition to the thought style of the Athenian philosophy of the 5th and 4th centuries, by identifying itself with a suppressed lineage. I would even suggest that Philostratus positions the Old Sophistic as a counter to the imperial tendencies of the Athenian democracy and its associated discourses and practices. This can be detected in his account of Gorgias, which emphasizes his opposition to war and implies that his Olympian Oration contained a coded message: "it was addressed to Athenians who had a passion for empire" (1.9.2) (Wright 1922, 33).

At the same time, Philostratus' construction of the Second Sophistic attempts to define a contemporary Greek community as the rightful heirs to this ancient line of sophists by, on the one hand, tracing networks, alliances and master-student chains of transmission on the basis of gossip and anecdotes, and on the other, explicitly dismissing certain 2nd and 3rd-century *sophistai* and *rhetores* from the canon and excluding others (who were thereby effectively effaced) (Eshelman 2008, 408-9). Philostratus' thought style was articulated in a fierce competition over cultural capital: with the revaluation and appreciation of public speaking, a premium was put on genuine sophists—those who could demonstrate their pedigree and credentials. Hence this thought style from the eastern periphery was able to gain access to prestige and influence at the centres of imperial power through a process of revisionist reconstruction, self-definition and exclusion.

It bears emphasizing that the scholarly analyses identify cultural practices (Kemezis (2014) and discourse (Eshelman 2008) as central concerns in Philostratus' project. In contrast to philosophy, the sophistic art is depicted as a practice that can educate, edify and entertain a receptive public. Though Philostratus based his canon on some examples of written style (e.g., Critias), eloquent improvised speech was defined as the primary medium for attracting the public and conveying content. However, unlike Plato's written texts, which represent, re-enact and contrast the practices of delivering sophistic monologues and engaging in the dialectical exchange of philosophical conversation, Philostratus' text predominantly contains descriptions of sophists and anecdotal accounts of their lives rather than representations of their art. Thus the sophistic art is consistently positioned as a cultural practice that occurs outside the textual field of written texts, in direct engagement with the public, while Philostratus' written text functions as canon-defining discourse. In Fleckian terms, it defines *who* belongs to the thought collective and describes *what* the thought style does, but it does not represent the thought style in action, as Plato's texts do. However, on another level of functionality, Philostratus' text ultimately employs the antagonistic and exclusionary discursive strategies that characterize Plato's texts.

Critias in the 20th and 21st centuries

In the 20th century, Philostratus' categorization of Critias as a sophist is adopted and exemplified by the collection *The Older Sophists* edited by Sprague (1972). This handbook eschews the earlier inclusion of Critias under the broader category of the Pre-Socratic Philosophers by Harmann Diels in 1903 (Diels-Kranz 1960, 371-399) and Kathy Freeman in 1948, and instead presents "a complete translation of the sophist material in Diels-Kranz" (Sprague 1972, vii). The criteria for extracting this sophist material from the Diels-Kranz fragments is not made explicit, but the introductory notes to the translated fragments emphasize reputations for eloquence and teaching rhetoric (Protagoras), familiarity with rhetoric (Gorgias), being an accomplished speaker (Prodicus), oratory (Thrasymachus), lecture tours and oratorical displays (Hippias), and oratorical style and speeches (Antiphon). However, when it comes to stereotypical sophistic practices, Donal Norman Levin's introductory note on Critias only mentions that "Critias produced both prose and verse" (Levin 1972 [2001], 241). Then, tellingly, the fragments on Critias' Life and Writings begins with Philostratus' account from *Lives of the Sophists*: "Even if Critias the sophist brought down the democracy …" (242).

W. Thomas Schmid's 1998 study, *Plato's Charmides and the Socratic Ideal of Rationality*, recycled all the key components of the characterisation of Critias passed down through Xenophon, Epicurus, and Philostratus, thus he is described as "a sophist", "an atheist", "a sensualist" and "a bloodthirsty reactionary" (1998, 12). In Schmid's reading, Plato's *Charmides* is aligned with the other early dialogues that expose the dangers of sophistry: "The drama of the *Charmides* will take us a long way toward understanding Plato's view of the relation between Sophistry and Critias' future tyranny, and of why Socrates did not have a more benign effect on him and his ward" (1998, 14). Lastly, rather than seeing any value in Critias' definitions of *sophrosyne*, Schmid treats them as examples of a traditional virtue corrupted by atheist sophistry and a nihilistic, self-interested desire for power (1998, 38).

More recently, Lampert reproduced the image of Critias as an atheist-sophist in his Nietzschean *How Philosophy Became Socratic* (2010). Despite advocating a contextual approach to Plato's dialogues that pays particular attention to their dramatic dates and personae, as well as to the broader background of the history of Athens, Lampert's reconstruction remains firmly anchored within Plato scholarship and thus his recontextualization is actually rather limited. Critias is described as a second-generation sophist, "a future sophist and future tyrant" (2010, 148, 157), and is presented as a subtle, sophistic atheist who has misunderstood Socrates' philosophy. Hence for Lampert, the *Charmides* is essentially the story of Socrates returning to Athens after the battle of Potidaea to find that his philosophy has been misinterpreted and distorted by Critias, whose claim to a knowledge of other knowledges will ultimately be used to justify his claim to a right to rule (2010, 198, 219). On Lampert's reading, Socrates' reduced definition of knowledge of knowledges (i.e., knowing whether a knowledge's claims to knowledge are possible, thus knowing the absence of knowledge) allows him to counter Critias' claim to knowledge of *what* other knowledges know. In Lampert's Nietzschean reading, this strategy allows Socrates to subordinate knowledge of good and evil to *sophrosyne*—which can therefore rule absolutely, "by ruling in or ruling out what can count as knowledge" (2010, 213, 222). Critias' claim to the right to rule is thus revealed to be unjustified, while Socrates' has laid the foundations for asserting the rule of the philosopher in the *Republic* (2010, 225). So the *Charmides* fits within Lampert's overarching framework which casts Socratic philosophy as responding to and overcoming "the Greek enlightenment", or "the sophistic enlightenment"— a cultural phenomenon which Lampert does not define explicitly, but which he suggests was intimately bound up with the rise of the Periclean democracy (2010, 27, 62, 132). In a nutshell, similarly to Schmid, Lampert treats the *Charmides* as a step in the emergence of Socratic

philosophy from its confrontation with sophistry, which in this instance is represented by Critias' uniquely dangerous sophistic distortion of Socrates' emerging philosophy.

Tuozzo's "nonachronistic interpretation"

As was mentioned, Thomas M. Tuozzo (2011) rejects both the ancient-traditional representations of Critias and recent scholarly works that reproduce their key components. He draws extensively on historical studies and recent Italian scholarship to put aside the standard view of elenctic argument underpinned by "the broad philosophical framework of twentieth-century Anglo-American philosophy" and attempts to develop "nonanachronistic interpretation" of the philosophical reasoning presented in Plato's dialogues (2011, 6, 14). The issue of nonanachronistic interpretation will be addressed from the perspective of Fleck's theory in the next section; this section will be restricted to highlighting the import of Tuozzo's interpretation and conclusions.

In Tuozzo's interpretation, Plato's characterization of Critias is broadly sympathetic: in the *Seventh Letter* Plato admits to hoping that when the oligarchs took power in the coup of 404-403 they would lead Athens from an "unjust way of life to a just way and then administer it" (324d4–5)[40] (Tuozzo 2011, 62); Critias is assigned a positive role in Plato's *Timaeus*, as a member of the educated class who has knowledge beyond that of the layman (2011, 65); and, as mentioned previously, Tuozzo reads Critias' definition of *sophrosyne* as a serious contribution and basis for developing this concept—through dialectical conversation—from aristocratic awareness of the restraints imposed by social position, and thus self-knowledge, towards reflexive epistemology and knowledge of the Good.

The idea that Plato depicted Critias as a philosopher rather than a sophist can actually be brought into alignment with Xenophon's report that during the rule of the Thirty Critias was responsible for a law that "made it illegal 'to teach the art of words'" (*Mem*. 1.2.31) (Marchant 1923, 27). Xenophon adduces this fact as evidence of a split and conflict between Socrates and Critias, suggesting that the decree specifically targeted Socrates' practices. Yet Xenophon is forced to acknowledge that, if such was the purpose—the law made no sense: "For I myself never heard Socrates indulge in the practice, nor knew of anyone who professed to have heard him do so" (*Mem*. 1.2.31) (Marchant 1923, 27). In any case, Lampert, who trusts Xenophon's' account without question, treats this law as evidence of Critias' cynicism, borne of his atheism

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[40] Tuozzo assumes the Seventh Letter is genuine: "The letter was either written by Plato or by someone whose understanding of Plato is deep and whose views will prove useful in developing a fruitful methodology for interpreting Plato's dialogues" (2011, 21).

and unbridled pursuit of self-interest (2010, 189). In contrast, Tuozzo argues that the decree would have been entirely consistent with Critias' social theorizing: according to his Spartan ideal, a man belongs to the aristocratic elite not by virtue of good birth and wealth, nor by "training in skillful speech", but by "a lifelong practice of aristocratic self-cultivation" and self-mastery (Tuozzo 2011, 86). Thus textual evidence (Critias' fragments, Xenophon's accounts, Plato's dialogues) justifies constructing the following facts: the historical Socrates and Critias were opposed to those who taught the art of speech; the historical Critias went beyond the desire to rule over and supervise all cultural practices expressed by the fictional Socrates and Critias in the *Charmides* and actually crafted laws to this effect, with a specific focus on the practices associated with the *sophoi/sophistai*.

So, if the *Charmides* is not another instance of Socrates articulating his thought style at the expense of a sophistic opponent and the sophistic art in general, what exactly is the strategic purpose of this text? Tuozzo emphasizes the dialogue's aporetic function: Plato is read as *representing* philosophy as a cultural practice (2011, 14). The actual practice of philosophy is not contained in the text; the written dialogues merely represent what philosophers do, namely engage in the dialectical activity of private philosophical-eductaional conversation (rather than in the public practice of oratory, delivering legal speeches etc.). Thus, if the practice of philosophy is defined as existing outside the written text, as indicated in the *Phaedrus* (275-77), the most that a written text can do is provide reminders of philosophy or, as Tuozzo suggests, recommend the practice to readers. Suitable readers who encounter one of Plato's aporetic dialogues should be stimulated by the representation of philosophy: prompted to make their own connections, to think they can do better, to seek out a philosophical community, and thus to actually engage in this cultural practice and live the philosophical life (Tuozzo 2013, 18).

The crucial point here is that, on this interpretation, Socrates, Critias and Charmides are represented as engaging in the same cultural practice: they are all *doing* philosophy. Thus the purpose of the dialogue is not to show how Critias distorted Socrates' philosophy with sophistry, and hence to lay the blame for the oligarchic coup of the Thirty Tyrants in 404-403 on Critias' sophistic corruption. The aim is rather to present philosophers grappling with a set of problems connected with knowledge, and ultimately failing, due to the gaps in their reasoning, and thereby force the reader to interact with the concepts presented in the text. Thus construed, Plato's aporetic dialogues functioned as a kind of marketing strategy that was intended to attract readers outside the school (Tuozzo 2011, 16,280).

At the end of the *Charmides*, Socrates highlights that the reduced knowledge of knowledges—i.e., knowing *that* a person who claims to be a doctor or craftsman knows or does not know something—is not in itself a productive knowledge that produces any tangible benefit: "Then how will temperance [*sophrosyne*] be useful when it is the craftsman of no useful thing?" (175a). Since Socrates and Critias had just reached the conclusion that the knowledge that makes men happy and that ensures the other sciences are well and beneficially done is the knowledge of good and bad (174b-d), it is evident that a connection could be made between *sophrosyne* and the knowledge of good and bad. Knowledge of good and bad clearly produces benefit, which is what is lacking in the definitions of *sophrosyne* as knowledge of knowledges, but neither Critias nor Socrates make the connection and redefine *sophrosyne* with an additional knowledge-of-good-and-bad component—this is left to the reader:

> […] the elaborate discussion of the various formulations of self-knowledge is to be brought into relation with, and so help illuminate, what is in itself the rather opaque notion of a knowledge of good and bad. This is the non-trivial philosophical task that the reader is invited to take up. (Tuozzo 2011, 280).

The ominous, ambiguous and much-discussed ending of the *Charmides*, where Critias and Charmides are said to be plotting out of Socrates' earshot, leading Socrates to ask "Are you going to use force, […] and don't I get a preliminary hearing?" (176c) (Sprague 2010, 96), reminds us of the setting of the conversation, i.e., Socrates' return from the Battle of Potidaea and the outbreak of the Peloponnesian War, which would have prompted Plato's contemporary readers to consider the dialogue in the light of Critias and Charmides' later roles in the oligarchic government of 404-403. Nevertheless, there is no explicit condemnation in Plato's text. Tuozzo concludes that the ending points to "the fact that any attempt to reform society so that it is directed toward the good requires more than reflection on the relations of the various kinds of knowledge that must be in play in the city" (2011, 303).

The aporetic gap between *sophrosyne* as knowledge of knowledges and knowledge of good and bad is finally closed in the *Republic*, where Socrates identifies the Form of the Good as the source of all usefulness and benefit (505a2-b3), and argues that knowledge of this Form has "epistemic priority" (Tuozzo 2011, 314) over all modes of knowledge and forms of production. Thus, when read in the light of the *Seventh Letter* and the *Republic*, the message that can be construed from the *Charmides* is that Critias' error was not his attempt to rule and change the constitution of Athens; it was rather that he failed to base his rule on the knowledge

of the Good, and based it purely on his aristocratic claim to self-knowledge and his claim to superior knowledge over other arts and practices.

Conclusion: anachronism, bias and Comparative Epistemology

When formulated through the lens of Fleck's theory, Tuozzo's interpretation gives grounds for concluding that Plato represented Socrates and Critias as belonging to the same specific thought collective, and hence that their communication can be treated as the expression of a distinct thought style. This thought collective can provisionally be identified with a section of the Athenian male elite (*aristoi*) who were conscious of the position of their social group within the broader collectives constituted by the classifications of the Athenian imperial democracy: hierarchically ranked male citizens, resident non-citizens (metics), imperial subject-allies, women, slaves.

This elite thought collective consciously attempted to maintain its intellectual lineage by redefining and adapting inherited aristocratic concepts (the proto-idea of *sophrosyne*), by engaging in elite cultural practices (sympotic poetry, the private speeches and recitations associated with symposia, the secretive discourse of political clubs (*hetaireiai*) and sworn associations (*synōmosiai*))—which in Fleck's terms can be described as esoteric circles (Fleck 1935a [1979], 105-7)—and between 431 and 403 by articulating increasingly vocal opposition to other, more public- and *demos*-oriented thought collectives whose thought styles were communicated through political oratory, legal speeches, rhapsodic recitations, theatre performances etc.

On the basis of this perspective, it can be posited that Plato's thought style emerged from the historical thought collective represented in the fictional *Charmides*, and therefore that he inherited many of its preoccupations and prejudices, such as the hostility towards other thought styles, which was consistently communicated through reflections on how to classify, evaluate and supervise their communicative practices.

Plato's complex texts can thus be identified as having several key functions: 1), representing the historical thought style of *philosophia* as it emerged from the aristocratic tradition and the oligarchic thought style that was communicated in the 420s and went on to seize power in 411 and 404; 2) highlighting the internal divisions and failures of this historical thought style, in response to which Plato's thought style offers solutions; 3) self-defining and establishing the thought style of philosophy *at the time of writing* through discursive representations which antagonistically and intertextually elevate philosophy at the expense of

other thought styles and practices that are consistently homogenized, devalued and/or subordinated through assimilation across Plato's texts, with the ultimate aim of supervising, excluding or outlawing these thought styles.

The success of Plato's discursive strategies is evident, *inter alia*, in the overwhelmingly negative image of the sophists and the sophistic art transmitted from 4th-century Athens to through to the present day; in the pejorative connotations of the word "sophistry"; in the transmission of fragments of "sophist" authors rather than entire works; and in the persistently uncritical use of Platonic categories and frameworks (e.g., the opposition between philosophy and sophistry; the Socratic caesura (Laks 2018)) in modern academic philosophy. Thus while Plato's texts only claim to represent the thought style of philosophy (as an elite oral practice), these written representations ultimately achieved many of the aims of the Athenian oligarchic thought collective c. 431-403 BC: e.g. such as excluding *demos*-oriented oral practices from cultural transmission, by ensuring the study of philosophy remained an elite thought style (e.g., propagated behind the walls of educational institutions, beginning with the Academy).

As was mentioned, Tuozzo highlighted and attempted to avoid the anachronistic bias implicit in the interpretative layers of accreted traditions, in order to develop "a nonanachronistic interpretation" of the reasoning represented in Plato's dialogues (2011,6-14). Thus, in Fleckian terms, Tuozzo attempted to discard the lenses of previous thought styles through which Plato's texts have been viewed, specifically those of 20th century Anglo-American scholarly philosophy, Philostratus' 2nd century AD sophistic reconstruction, and the historiographical tradition of the 4th century BC. By using historical studies, recent Italian scholarship and his own careful reading of the Greek originals, Tuozzo successfully sheds light on aspects of the historical Critias and Plato's texts that had been obscured by the previous lenses. However, the notion of achieving a nonanachronistic interpretation is deeply problematic, particularly in the light of Fleck's theory.

Fleck's interactionist model of comparative epistemology suggests that anachronism, which for historians is "the worst of all sins, the sin that cannot be forgiven" (Febvre 1982, 5), is in fact inevitable. We can recall that Fleck describes communication between thought collectives as "feasible" but subject to complexity, as it is "always connected with a more or less marked modification of the ideas" (Fleck 1936 [1986], 85). The closer thought collectives are too each other—in terms of subject matter, adopted terminology, communicative function and purpose, spatial and temporal proximity—the less the ideas will be modified in the communication; and vice versa, the greater the distance, the more the ideas will be modified in the communication, to the point that communication actually becomes minimal or non-existent.

Therefore, even if were able to discard the lenses of previous thought styles that stand between us and a source text like Plato's *Charmides*—a possibility which is very questionable, given that the transmission of the text has been determined by the evaluations, formatting and editing of other thought collectives—we would still inevitably bring the biases of our own thought styles to bear in our interaction with the text.

Using historical studies to counter the biases implicit in the tradition of academic philosophy may uncover aspects and determinants of the textual phenomena that eluded or were suppressed by the latter thought style, but they in no way guarantee that our fresh interpretation is based on an unbiased account of historical facts. The history of 5th- and 4th-century Greece has been highly-contested and filtered through the lenses of competing thought styles, ranging from Thomas Hobbes' pro-monarchical reading of Thucydides (1629),[41] George Grote's reading of Thucydides through the lens of the English legal system and the British Empire (1857),[42] through G. E. M. de Ste. Croix's pro-Soviet reading of the Athenian Empire (1954, 23) and Donald Kagan's NATO-inspired justification of the Delian League (1969, 41-42), to Lisa Kallet's recent critique of the transformationist model and "Athenocentric" discourse (2013, 2018).

The Oxford Dictionary defines "anachronism" as "the attribution of a custom, event, etc. to a period to which it does not belong" (1995, 44). Some of the most esteemed historians of the 20th century were clearly guilty of projecting attitudes and convictions characteristic of the Cold War back into the historical Greece of the 5th century BC. However, I would argue that the reassessment of Critias—beginning with Peter Krentz's *The Thirty at Athens* (1982), continuing in Andrew Wolpert's *Remembering Defeat* (2002), and culminating in a kind of rehabilitation in Tuozzo's *Plato's Charmides* (2011)—is not free from such anachronism, since

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[41] "He praiseth the government of Athens, when it was mixed of *the few* and *the many;* but more he commendeth it, both when Peisistratus reigned, (saving that it was an usurped power), and when in the beginning of this war it was democratical in name, but in effect monarchical under Pericles. So that it seemeth, that as he was of regal descent, so he best approved of the regal government" (Hobbes 1629 [1843], xvii).

[42]"It is to be recollected that the Athenian empire was essentially *a government of dependencies*; Athens, as an imperial state, exercising authority over subordinate governments. To maintain beneficial relations between two governments, one supreme, the other subordinate, and to make the system work to the satisfaction of the people in the one as well as of the people in the other, has always been found a problem of great difficulty. Whoever reads the instructive volume of Mr. G. C. Lewis (Essay on the Government of Dependencies), and the number of instances of practical misgovernment in this matter which are set forth therein, will be inclined to think that the empire of Athens over her allies makes comparatively a creditable figure. It will, most certainly, stand full comparison with the government of England, over dependencies, in the last century; as illustrated by the history of Ireland, with the penal laws against the Catholics; by the Declaration of Independence, published in 1776, by the American colonies, setting forth the grounds of their separation; and by the pleadings of Mr. Burke against Warren Hastings" (Grote 1857, 389; 1879, 48 footnote 91).

it is determined by a broader shift in attitudes to empire and coloniality that has led to changing perceptions of the Athenian Empire in scholarly reconstructions.

The classic 20th-century accounts of the Athenian Empire provided by Ste. Croix and Kagan are characterized by idealism and ultimately side with the Athenian democracy against the Spartan oligarchy, despite acknowledging the aggressive and often brutal expansionism of the Athenian *arche* (Ste. Croix 1954; Kagan 1969). Russell Meiggs offered a more critical account in *The Athenian Empire* (1972), which attempted to reconstruct contemporary perceptions of the Empire and argued that even those who were critical of the democracy (Thucydides, Aristophanes) still assumed that Athens was justified in subjugating its neighbours in the pursuit of self-interest. Meiggs highlights the difference in mentality between, on the one hand, the Athenians' sophist-inspired celebration of their power and dominance, and on the other, modern rights-based sensitivities and constitutional niceties (1972, 377-396) and concludes: "The evidence that has so far been examined suggests that the Athenians, both rich and poor, thought primarily of the benefits that empire brought to them and were not ashamed to say so" (1972, 404). Anton Powell added a reflexive component to this critical perspective in his handbook *Athens and Sparta. Constructing Greek Political and Social History from 478 BC* (1988), which reviews the biases of modern historians' accounts in the chapter on the Athenian Empire.

Krentz's reassessment of Critias, which for example argues that the Thirty did not take power through a coup but were instead elected as a government (1982, 50), and which Tuozzo describes as being part of an attempt "to arrive at a more balanced account of the motives, aims, and program of the Thirty" (2011, 61), can thus be situated within a broader shift towards more critical analysis of the Athenian Empire and its historiography.

In the 21st century, with the rise of discourse analysis, decoloniality, and subaltern studies, the study of the Athenian Empire became more critical and aware of the limitations of the 20th century framework. For example, Kallet criticized the transformationist model, which assumes "the Athenians changed from leaders of an alliance to hardened imperialists; the *hegemonia* became an *arche*" (2013, 43), arguing that the Delian League was expansionist from the outset. Her critique of Meiggs and other scholars leads her to signal the need to access the exterior of "Athenocentric" discourse, entailing a valorisation of studies that focus "as much on the *poleis* and communities in the *arche* as on Athens (2013, 44). As an example of such studies, Kallet cites Christy Constantakopoulou's *The Dance of the Islands: Insularity, Networks, the Athenian Empire, and the Aegean World*, which explores how the Delian League, under Athenian hegemony, exploited archaic religious networks as the basis of its thassalocracy

(Constantakopoulou 2007). Kallet also recommends dismantling "the standard periodizations", such as "sixth and fifth centuries, Archaic and Classical, pre-Persian Wars and post-Persian Wars", and focusing on continuities instead (2013, 52).

The point here is that, according to Fleck's epistemology, even if a philosopher manages to discard the interpretative layers that stand between him and Plato's text, or if a researcher manages to abandon the inherited periodizations of Athenocentric discourse and adopts a methodology that allows her to valorise phenomena excluded by the traditional framework, such projects could not claim to produce nonanachronistic or unbiased accounts, since these very acts of discarding, abandoning and revalorizing are determined by the thought styles of contemporary thought collectives. Tuozzo's rehabilitation of Critias as a serious oligarchic philosopher who seized power at a moment when the democratic constitution was in mortal danger obviously had contemporary relevance in 2011, in the aftermath of the 2008-9 Financial Crisis, the subsequent challenges to elite authority and the liberal-democratic consensus. Similarly, Kallet's repositioning the Athenian *hegemonia* of the 470s and 460s BC as an already aggressively expansionist form of ancient coloniality—that is, before the supposed hardening of the *arche* at around 454 BC assumed in the standard transformationist models—seems to be determined by the broader critique of Western hegemony exemplified by discourse analysis and deconstruction (e.g. Foucault, Said, Derrida, Spivak) and challenged by Mignolo's concept of decoloniality.

Thus, as far as Fleck's comparative epistemology is concerned, research that discards, dismantles or abandons standard accounts, narratives, categorizations, periodizations etc. can claim to have brought to light other phenomena, aspects of phenomena, histories, ways of constructing histories, networks, knowledge practices, and even epistemologies that have been excluded by the standard models and accounts, but this research cannot claim to have accessed unbiased or nonanachronistic facts, knowledge or accounts. In *The Problem of Unbelief in the Sixteenth Century*, Lucien Febvre made the following recommendation: "As always, anachronism comes into play. For in the end—to get back to Rabelais—we have to reread the words after taking off our modern eyeglasses, the ones of today; we have to read them with the eyes of another time" (1982, 289). This may be a paradoxical ideal, but according to Fleck, it is simply impossible: we cannot take off our modern eyeglasses, all we can do is use them to look at how people saw things in the past. We are unable to see or understand anything without our contemporary thought style, so, to reiterate, bias and anachronism are inevitable. The ancient Athenians organized and marked time with Archon years, so using the symbols "431

BC" instead of "the year of Pythodorus" to designate the start of the Peloponnesian War is a purely anachronistic projection in and of itself.

So, if we are condemned to anachronism and bias, what are our options as researchers? The maximalist option would be the Hegelian strategy of unashamedly appropriating concepts from the past and designating them as under-developed versions of modern concepts, whereby Protagoras' *paideia* can be treated as an early form of *Bildung*, and the sophists were almost German Burghers but for their lack of Platonic philosophy and the Christian God (see Chapter 5). A more minimalist option would involve a conscious and critical application of contemporary concepts, theoretical tools and explanatory frameworks aimed at bringing new phenomena to light, always trying to bear in mind that research phenomena are produced in interactive act of cognition. Fleck's project of *comparative* epistemology (1936, 97-98) can be treated as a way of pursuing the minimalist option: the act of identifying and characterizing historical thought styles is inherently comparative: not just in terms of comparing two historical thought styles to explain the emergence of one from the other (e.g., the emergence of the Platonic thought style from the oligarchic thought style communicated between 432 and 403 BC), but also attempting to be aware of one's own thought style in the process of cognition.

4.2.3 Reconstructing the Oligarchic Thought Style (432-403 BC)

As mentioned previously, in the *Charmides* Plato represented the preoccupations and practices of certain members of the Athenian elite that can be described, in Fleckian terms, as a specific thought collective that came to define its "oligarchic" thought style in explicit opposition to the thought style of the democratic orthodoxy; and that distinguished its cultural practices from those associated with communicating with or on behalf of the *demos* (e.g., political oratory, legal speeches, theatre performances) (Ober 1989).

Certain characteristics of this thought collective and its thought style can be reconstructed from Plato's texts and from the field of cultural production existing outside of them, thus from the accounts, representations and indications provided in Athenian texts produced in periods between c. 430 and c. 322 BC; and, more problematically, from Greek authors writing in the later period of Roman domination (60 BC – AD 119):

1) 431-400: the texts of the 'Old Oligarch', Thucydides, Aristophanes, and Euripides, written, circulated or performed in the decades prior to the composition of the *Charmides*;

2) 399-380: Xenophon's *Hellenica*, the relevant sections of which were probably written around the same time as the *Charmides*, i.e. 393-380 (Brownson 1961, ix); Callicles' nomos/physis argument in *Gorgias* 482-492, which could be dated to 387-385 (Dodds 1959)

3) 375-353: Thrasymachus' self-interest argument in *Republic* I.338-9; and the *Seventh Letter* attributed to Plato.

4) 332-322: *The Athenian Constitution* written by Aristotle and/or a student/students (Rhodes 2002).

5) Diodorus' *Bibliotheca historica* (60-30 B.C), Plutarch's Parallel Lives (100-119 A.D.)

Obviously, a great deal of caution must be exercised when attempting a cultural-historical reconstruction of this oligarchic thought collective, due to the biases and scant details of the historical accounts—"so little of the iceberg is visible above the water" (Rhodes 2000, 135), and because of the use of analogy, symbols, and comic exaggeration in the dramatic works. However, some key characteristics can be tentatively and provisionally identified.

478-461 BC - a projected mirage

Aristocratic opposition to the Athenian democracy is traced back, via the Aristotelian *Athenian Constitution* (c. 332-322) and Plutarch's anecdotal accounts (c. 100 AD), to the 470s and 460s (Rhodes 2000). In the traditional accounts, these decades are conventionally marked by the supremacy of Cimon—the wealthy, pro-Spartan noble (479-461), Athens' taking over the hegemony from Sparta with the creation of the Delian League (478), the ostracism of the democrat Themistocles (472 or 471), Cimon's ostracism as a result of his humiliating treatment by Sparta (461), and the onset of the radical democracy and Periclean era (461) (Hornblower & Spawforth 1999).

However, reconstruction of any thought collectives from the years 478-461 is immensely problematic, as this period falls into the almost fifty-year gap between the detailed accounts of Herodotus and Thucydides, i.e., between the end of the Persian Wars (479) to the beginning of the Peloponnesian War (431). The events of these years are only sketched in

Thucydides' notoriously selective digression known as the "Pentecontaetia" (1.89-117).[43] Crucially, the Pentecontaetia contains no references to the aristocratic/noble opposition to the *demos* which appears in the later accounts.

Both *The Athenian Constitution* and Plutarch's *Pericles* characterize this period as one of intense polarization or cleavage: Ephialtes and Pericles are cast on the side of the *demos*, or the people, with their attack on the Council of the Areopagus—the constitutional bastion of aristocratic conservatism, while Cimon and Thucydides (son of Melesias) are cast on the side of the few (*oligoi*) and the wealthy (*euporos*):

> […] Ephialtes was champion of the people and Cimon son of Miltiades champion of the wealthy; then Pericles was champion of the people and Thucydides, a relative of Cimon, champion of the others. (*Ath. Pol.* 28.2)

> Now there had been from the beginning a sort of seam hidden beneath the surface of affairs, as in a piece of iron, which faintly indicated a divergence between the popular and the aristocratic programme but the emulous ambition of these two men cut a deep gash in the state, and caused one section of it to be called the 'Demos,' or the People, and the other the 'Oligoi,' or the Few. (Plut. *Per.* 11) (Perrin 1932, 33)

In Plutarch's account, this gash (or "cleavage" (Scott-Kilvert, 1960)) is said to have been completely healed in the Periclean era, when Athens became "altogether united" (Plut. *Per.* 15).

P.J. Rhodes suggests that aspects of the account of the 470s and 460s presented in *The Athenian Constitution*, such as the dominance of the Council of the Areopagus, are "clearly anachronistic" and "a product of fourth-century rationalizing" (Rhodes 2000, 121, 124). If this Aristotelian account can be described as anachronistic, then the same has to be said of Plutarch's account, which drew on *The Athenian Constitution* and other 4th-century historical accounts that are completely or mostly lost to us (e.g., those of Ephorus and Theopompus (Stadter, 1989)).

In *The Lame Hegemony* (2017), Matteo Zaccarini highlights the problematic nature of Plutarch's *Cimon*, the main source of Cimon's image as a pro-Spartan aristocrat (Plut. *Cim.* 16). Firstly, Plutarch was not focused on a factual reconstruction—his aim was rather to provide

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[43] For the debate on the Pentecontaetia, see Gomme (1945 [1971], 361-389), who describes this section of Thucydides' text as "scrappy", lacking chronological precision and full of ommisions, and Meiggs (1973, 445), who describes it as hurried and unintended digression. For a critique of these standard criticisms, see Kallet (2017, 77), where she suggests that these historians displayed a "tendency to judge Thucydides' Pentecontaetia by their own standard of what those interested in demonstrating Athens' rise to power should include".

instructive examples; secondly, Plutarch tended "to interpret Greek history through typically Roman categories – and vice versa" (Zaccarini 2017, 19); and thirdly, the way that Plutarch used his sources makes reconstruction immensely problematic:

> The fact that Plutarch's *Cimon* combines, juxtaposes, and (rarely) compares so many different ancient sources – each, in turn, originally arguing for its personal agenda – represents both a boon and a problem for modern scholarship. The original context of most of these fragments is indeterminable, just like the extent and scope of Plutarch's own intervention on his sources: as a consequence, the *Cimon* is as rich as troublesome a resource for the construction of the period under study. (Zaccarini 2017, 19).

It bears mentioning that the problematic nature of Plutarch's *Lives*, written over five centuries after the events they describe, is not registered in 20th-century accounts: for example, Kagan cites Plutarch as the main source for his reconstruction of the 470s and 60s ("Plutarch is certainly right when he reports …" (Kagan 1969, 60); then, in the footnote to support his assertion that Cimon was "a staunch believer in the 'dual hegemony' of Sparta and Athens", Ste. Croix states: "It will be sufficient to cite Plut., *Cim.* 16" (Ste Croix 1972, 172). In contrast to this approach, which simply took the only available reported facts for granted and used them for the basis of reconstruction and interpretation, Zaccarini's methodology shifts the focus away from the reconstruction of facts and circumstances to interpreting information in terms of its nature, aims and its "intellectual reception through the tradition" (2017, 24).

Hence the image of Cimon as the philolaconian champion of the *oligoi* is a "mirage" (Zaccarini 2017, 22): one that was projected back onto the 470s and 60s, through the entangled categories of the 420s, 4th-century nostalgia, and Plutarch's didactic project. Textual-discursive evidence for the perception of a polarized, factional conflict only appears in the 440s-420s, in the texts of Herodotus, the Old Oligarch (Pseudo-Xenophon), and Thucydides.

Herodotus – reflection on constitutions

According to Rhodes (2000, 124), apart from a few oblique indications in Solon (6th century BC), Pindar (468)[44] and Aeschylus (462)[45], the earliest surviving explicit uses of the terms

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[44] Pindar, *Pythian 2* (86-88): "In every polity the straight-speaking man is best—whether under a tyranny/or when the violent mob or wise watch over it" (Verity 2007, 49)

[45] Aeschylus, *The Suppliants*: "and to what course does the majority of the people's (*dḗmou*) votes incline?" (604) (Smyth, 1926)

dēmos, *dēmokratia* and *oligarchia* appear in Herodotus (3.80-82), specifically in the famous Debate of the Persian Nobles on the merits of tyranny, oligarchy and democracy.

In this debate, while Otanes associates the rule of the *dēmos* with *isonomia*, the principle of equality (Ostwald 1969, 107-8), Megabyzus dismisses this form of government as the rule of the violent and ignorant mass, and characterizes *oligarchia* (ὀλιγαρχία) as the rule of the best, also indicating that this form of government would conveniently include the present debate participants:

> Let those stand for democracy who wish ill to Persia; but let us choose a company of the best men and invest these with the power. For we ourselves shall be of that company; and where we have the best men, there 'tis like that we shall have the best counsels" (3.81.1) (Godley 1928, 107).

Darius' argument for monarchy is based on the recognition that oligarchy leads to rivalry and strife, which is said to always be resolved by the return of monarchy:

> But in an oligarchy, the desire of many to do the state good service ofttimes engenders bitter enmity among them ; for each one wishing to be chief of all and to make his counsels prevail, violent enmity is the outcome, enmity brings faction and faction bloodshed ; and the end of bloodshed is monarchy; whereby it is shown that this fashion of government is the best. (3.82.3) (Godley 1928, 109).

Thus Darius concludes that the optimal constitution is "the rule of the one best man", who will "govern the multitude with perfect wisdom" (3.82.2) (Godley 1928, 109).

The neat triple classification articulated in this debate, which has a dramatic setting of 522 but was probably composed c. 435, suggest that Herodotus was drawing on stock contrasts and characterizations (Sealey 1973, 273) that were commonplace in contemporary intellectual discourse. In the light of Herodotus' praise of the Athenian democracy (5.78) and Agariste's dream of giving birth to a lion of before giving birth to Pericles (6.131), which can be viewed as an unambiguously positive symbol and "triumphant climax" of the Alcmeonid genealogy (Harvey 1966, 255), it is recognized that Herodotus' reconstruction of a 6th-century debate about tyranny, oligarchy and democracy tells us more about the preoccupations of his contemporaries (Roberts 1994). An implicit evocation of Pericles can be read into Darius' assertion that "one best man" is needed—one who resolves factional division and rules wisely.

Thus, in Fleckian terms, it is evident that the concept of oligarchy was circulating among Herodotus' thought collective (e.g., the audiences at wisdom-performance recitals (Thomas 1992) (Oliver 2010)) and that the terminology was in the process of becoming established in "the existing fund of knowledge" (Fleck 1935a [1979], 38). While it would be a bit far-fetched to construe Megabyzus as a full-fledged fictional representative of the oligarchic thought style, Herodotus' text does suggest that a key conceptual framework was in place or was emerging. The three constitutions are conceived on a scale that slides from two extremes with key attributes: the ignorant multitude at one extreme, the perfectly wise monarch at the other. Rule is conceived is ranging from broad to narrow: the broadest constitution of democracy spreads power through the principle of *isonomia*, oligarchy narrows the distribution of power to the best men, and monarchy is the narrowest possible constitution, with power in the hands of one man. This conceptual framework establishes the basis for the distinctions between moderate, narrow and extreme oligarchy that were articulated between 411 and 403, reflected in the oligarchic coups which narrowed from the Four Hundred (411), to the Thirty (404-3), and in Xenophon's depiction of Critias wielding power almost single-handedly.

Herodotus' text does not so much represent an oligarchic thought style as indicate that the possibility of oligarchy had become a subject of conversation. The comparative nature of the Debate of the Persian nobles, featuring explicit criticisms of both democracy and oligarchy, suggests that a critical-reflexive awareness of possible constitutional forms was emerging, including a clear perception of how different forms of rule distributed power in the polis. I would suggest that the Athenian experience of transformative top-down social engineering (Solon's legislative reforms c. 594, Cleisthenes's state reforms c. 508), and of Peisistratus' attempt at tyranny (561/0), combined with Athens' existential struggle with the Persian empire (480-79) and its subsequent conflict with Sparta during the First Peloponnesian War (461-445), entailed that Athenians were acutely aware both that their constitution—i.e. social, legal and political organization—could be completely reorganized, and that the constitutions of their rivals were organized along completely different lines.

Thus the possibility of a narrower constitution c. 435, at the time Herodotus was probably writing and reciting in Athens, was not just idle speculation: the Periclean era was one of Athenian imperial domination, entailing great wealth and vast public expenditure, so the radical democracy held the consensus, but discontent, crisis and revolt were never far away (Meiggs 1972, 153-158), and war with Sparta and its allies was brewing. The conceptual distinctions and framework that Herodotus projects back to the safe distance of 522 were ideas that could be and were put into practice; they concerned things that could be done in the here

and now of the 430s. Therefore, many of the elements that Fleck identified as being necessary for a change of thought style, or the emergence of a new thought style, were in place: social and intellectual unrest, the circulation of ideas, strong individuals.

Herodotus' text also provides evidence that the concept of oligarchy had entered into written discourse: a field of cultural production becomes visible to us, as do a range of cultural practices: the representation of debate, the textual basis of wisdom-performance, the valorisation and dissemination of written texts among the Athenian elite.

The Old Oligarch – opposition to the *demokratia*

The first surviving articulation of the oligarchic thought style is found in the Old Oligarch's *Athenaion Politeia* ("The Constitution of the Athenians"). The text's authorship and circumstances of composition have long been the subject of debate, but in the introduction to their edition and commentary, J.L. Marr and P.J. Rhodes date the text to between 431 and 425 and suggest that the treatise has the textual features of "an academic composition, a lecture or paper, a classroom orator's exercise" (Marr and Rhodes 2015, 5, 15). So, rather than being Xenophon or an actual old oligarch, the author was probably a young man who was being schooled in the art of constructing and presenting arguments. As such, it sheds light on the thought style of "certain upper-class Athenians" who formed "a hard core of anti-democratic irreconcilables" (2015, 16, 20). The work directly articulates many discursive positions that are only represented or dramatized in the texts of Aristophanes, Thucydides and Plato. These features are extracted and analysed below.

1. **Discursive antagonism**. The author consistently uses a "restricted and partisan sense of *demos*" which is identified with the poor majority (Marr and Rhodes 2015, 19) in order to define an enemy that is inherently opposed to and in conflict with his own group, the *oligoi*. For example:

> Next, a thing which some people are surprised at, namely the fact that in every area they assign more to the worthless and the poor and the common people than they do to the valuable; but it will become clear that it is precisely through this practice that they preserve their democracy. For the poor and the common people and the inferior classes will increase the strength of the democracy by doing well and by increasing the numbers of themselves and their like. If, however, the rich and the valuable do well, the common people make the opposition to themselves strong. (1.4) (Marr and Rhodes 2015, 37)

Marr and Rhodes do not hesitate to describe such passages as expressions of "class hatred" (2015, 16, 24-26). Similarly, Roberts described the text as "the first extant account of democracy as the calculated suppression of one class by another" (1994). The Old Oligarch's consistent use of a network of oppositions, which are organized around the core structural opposition of the πονηροί/*poneroi* (worthless, base, bad), vs. χρηστοί/*chrestoi* (the valuable, good, noble), create an image of a binary conflict and ineradicable antagonism (Mouffe 2005) between political and social classes, in which the Athenian state, legal system and empire are depicted as captured by the *demos* and are being wielded against the *oligoi*.

The references to trade and commerce (1.2), self-interest (1.6), the importance of slaves and metics (1.10-12), the appropriation of property (1.14), the connection between lawsuits, jury pay and the demos (1.16), and trade interdependencies (2.11), justify describing the author's perceptions in terms of class and drawing on the functional conception of ideology outlined in Section 3.5.2 of the present work. The Old Oligarch's thought style articulates a position of resistance with regard to the radical democracy, which is depicted as representing the economic interests of the *poneroi*—the lowest class in terms of value, but the dominant class in terms of power.

Meiggs described the Old Oligarch's depiction of Athenian democracy as "a cynical analysis" (1972, 115). Marr and Rhodes describe his basic assumptions as flawed, arguing that the analysis which can be attributed to his circle "just did not correspond to contemporary reality" (2015, 20). This contemporary reality is supposedly accessible outside of the Old Oligarch's text through reconstructing the universal and inclusive sense of the word *demos* more commonly used by his contemporaries (e.g. Pericles in Thucydides' reproduction of his Funeral Oration of 430 (Thuc. 2.34-46)), and through a reconstruction of the social organization of Athens: the Attic farmers of the hoplite rank did not belong to the *oligoi*, but the Old Oligarch cannot include them in his pejorative designation of the demos as the worthless urban poor, so his binary *demos vs. oligoi* conflict does not match up with reality (Marr and Rhodes 2015, 21-22).

Thus, setting questions of reality aside, the question from the perspective of Fleck's theory is whether the Old Oligarch's perception of the Athenian *demokratia* being geared towards the benefit of the urban poor (and metics, as we shall see) was a commonly-shared perception among the general thought collective constituted by the Athenian elite, or whether his treatise marks the emergence of a new thought style, a heretical position articulated in the field of cultural production, to use Bourdieuan terminology.

2. **The evocation of broader antagonism and intra-class conflict**. Though ostensibly focused on the specific constitution of the Athenians, after a few dozen lines the author generalises the structural division and binary antagonisms (the best – *beltistoi*, the valuable vs. the worthless , the ignorant) to a more universal level:

> Throughout the world the best element is opposed to democracy. For within the best men there is the least amount of licentiousness and injustice, and the most scrupulousness over what is valuable; whereas within the *demos* there is the greatest ignorance, indiscipline and worthlessness. (1.5) (Marr and Rhodes 2015, 37)

Later on, when the Old Oligarch's account turns the focus to the democracy's empire, he explicitly indicates that the antagonism between the *demos* and the *oligoi* is not peculiar to Athens:

> But with regard to their allies, and the claim that they sail out there and bring malicious charges against, and hate, the valuable among them – it is because they know that the ruler is necessarily hated by the ruled, and that, if the rich and strong come into power in the allied states, the empire of the Athenian *demos* will only last for a very short time. That is the reason why they take away the political rights of the valuable, and confiscate their property, and exile and kill them, and, correspondingly, promote the interests of the worthless. But the valuable men at Athens try to protect the valuable men within the allied states, since they realise that it is good for themselves always to protect the best men in the allied states. (1.14) (Marr and Rhodes 2015, 41)

From this section and others (2.17, 2.20) it is evident that the author believes the allied states and other Greek *poleis* are either oligarchically-governed or oriented towards the interests of the *demos*. Thus, as Ste. Croix noted, the Old Oligarch simply "takes it for granted that the Greek states were deeply divided on social and economic lines into broad groups between which there existed a permanent and deep-seated antagonism" (1954, 24). On this account, when it sailed overseas, the Athenian *demos* encountered the universal structural division wherever it went and exploited existing class hatred. Writing from a Marxist perspective, Ste. Croix both stressed the value of the Old Oligarch's viewpoint and claimed he painted an accurate picture of the social and economic reality:

> […] his pamphlet is particularly valuable for the light it sheds on the viewpoint of the upper classes in states other than Athens. The picture he draws, with its extremes of black and white, is of course

somewhat exaggerated and over-simplified, but its basic division of the citizens of the Greek states into two broad economic and social categories between which there existed a deep-seated political tension, is amply confirmed by other contemporary evidence (Ste Croix, 1954, 25).

The other contemporary evidence that ostensibly confirms this social and economic binary antagonism is, according to Ste. Croix, provided by Thucydides and Xenophon; that is, by the representations of other elite Athenians whose writing is, while more complex than the stark simplifications of the Old Oligarch, nevertheless driven by agendas.[46]

In contrast to this Marxist model which treats the *oligoi* as a broadly homogenous social and economic entity, a unified class with shared interests, other scholars have argued that the last decades of the 5th century saw the emergence of divisions within the ruling class, that is, between members of the elite who supported and benefited from the radical democracy and those who opposed it. The latter group could include members of the old aristocracy (e.g., Critias and Charmides) who probably drew on an established tradition of opposition to the *demokratia*, but it could also encompass newly-rich Athenians whose families had risen to prominence during the 5th century, who might have benefited from the influx of wealth from empire and/or Pericles' largesse, but whose loyalty was contingent and opportunistic (Rhodes 2000, 131-33). This intra-class conflict is clearly signalled by the closing section of the Old Oligarch's treatise, which accuses the *oligoi* who are politically active in democracies of injustice and wickedness:

> Now I forgive the demos themselves for their democracy. For one has to forgive anyone for looking after himself. But whoever is not a member of the *demos*, and yet has chosen to have a political life in a democratic city rather than an oligarchic one, has deliberately set himself to act unjustly, and has realised that it is easier for a man who is wicked to escape notice in a democratically governed city than it is in an oligarchic one. (2.19) (Marr and Rhodes 2015, 51)

So, in addition to the permanent structural division between the *demos* and the *oligoi* in Athens and across the empire, the author also signals a division within his own class that is framed in terms of an unforgivable betrayal of class interests.

The Old Oligarch's text can therefore be construed as marking the emergence of a self-identifying, oppositional thought style, or an ideology, which disassociates itself from the elite

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[46] Powell suggests a five-part model, also inspired by Thucydides' comments.

thought style identified with the social, economic and imperial policies associated with the radical-Periclean democracy. As such, the pamphlet articulates a discursive position that is defined by its two-fold opposition to both the *demos* and those members of the *oligoi* who can be accused of disloyalty to their class. That this position was more widely articulated (i.e., that it was an established position in "the space of possibles" (Bourdieu 1993, 30)) is supported by Marr and Rhodes' argument that the text was produced in an educational setting, and by similar articulations and framings in other contemporary or near-contemporary works. For instance, the notion that the Athenian *oligoi* perceived themselves as having more in common with the *oligoi* from other *poleis* than with the Athenian *demos*, in terms of economic interests and maintaining the privileges associated with rank, is theme that recurs throughout Thucydides' History (especially in his account of the oligarchic coup of 411, (Thuc. 8.64-99)). Over three decades later, the framework of intra-class conflict establishes the discursive coordinates for Xenophon's depiction of the clash between Critias and Theramenes (extreme oligarch vs. moderate oligarch) (*Hell*. 2.3).

3. **The Theory of Self-Interest**. The author of the treatise does not criticise the Athenian *demos* or *demokratia* through reference any absolute moral criteria. The declared purpose of the text is to explain how effectively the Athenian constitution works to further the interests of the worthless *demos* (1.1). The implication is that if the *oligoi* govern the *polis*, they do so in their own interests (not for the interests of the *polis* itself). It is suggested that the *oligoi* would govern better, because there would be less ignorance, licentiousness and injustice among such rulers (1.5), and would stand by their oaths due to the public prominence associated with the rule of the few (2.17), but their primary motivation would be self-interest.

Rhodes identifies this worldview as being the result of the sophists' theoretical innovations:

> The idea that the lower classes prefer democracy because it serves their own interests is a product of the sophists' distinction between *physis* ('nature') and *nomos* (human 'convention'): the form of government belongs to the realm of *nomos*; there is no absolutely right form; but each man will prefer the form from which he stands to benefit, and this is in accordance with *physis* (Rhodes 2000, 129).

Rhodes supports this interpretation with a footnote citing Lysias' *Defense Against a Charge of Subverting the Democracy* (c. 401-399 BC)[47], Xenophon's representation of Alcibiades' questioning of Pericles on the issue of law and violence in *Memorabilia* 1.2.40-46[48] (written after 371 BC), and Aristotle's *Politics*[49] (c. 330s). In other words, the attribution of the theory of self-interest to the sophists is based on works written after the rule of the Thirty 404-403, at a time when oligarchy was being vilified, following the restoration of the democracy and the subsequent discursive measures (e.g. the legal-constitutional reforms begun in 403 (Wolpert 2002, 41-42) (Carawan 2013)). It would also seem that Rhodes implicitly classed Lysias and Alcibiades as sophists, yet the former has been described more precisely as a metic-businessman who made a living as a speechwriter (Carawan 2013); while, in the light of the previous sections of this thesis, Alcibiades can be identified as a member of the Athenian elite who, like Critias and Charmides, drew on the aristocratic tradition of opposition to *demokratia*, and who, from the 430s onwards, can be identified as communicating a new thought style.[50]

The theory of self-interest is represented across the Athenian field of cultural production, most prominently in Thucydides' *History* (1. 75-76), in Plato's *Gorgia*s (481b–527e) and *Republic* (I. 336b–343); hence, bearing in mind Tuozzo's rejection of the traditional classification of Critias as a sophist analysed in the previous section, I suggest that self-interest theory articulated by the Old Oligarch is not reducible to sophistic relativism. While it may have been influenced by the deliberative-argumentative practices associated with sophistry, the Athenian democracy, and the Periclean supremacy, the distribution and representation of the theory of self-interest across the field of cultural production, as a consistent explanation for political practices and organisation suggest that this idea functioned as a discursive tool that enabled a section of the Athenian elite to reject the orthodox, inclusive sense of the word *demos* and to define its interests as incompatible and irreconcilable with the interests of the *demokratia*

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[47] Lysias, 25.8: "Now, first of all, you should reflect that no human being is naturally either an oligarch or a democrat: whatever constitution a man finds advantageous to himself, he is eager to see that one established; so it largely depends on you whether the present system finds an abundance of supporters". http://data.perseus.org/citations/urn:cts:greekLit:tlg0540.tlg025.perseus-eng1:8

[48] Xenophon, *Mem*. 1. 2.44-45: "But force, the negation of law, what is that, Pericles ? Is it not the action of the stronger when he constrains the weaker to do whatever he chooses, not by persuasion, but by force ? […] "And when the minority passes enactments, not by persuading the majority, but through using its power, are we to call that force or not ?" (Marchant 1923)

[49] Aristotle, *Pol.* 1279,25-31: "Since "constitution" and "governing class" signify the same thing,46 and the governing class is the authoritative element in any city-state, and the authoritative element must be either one person, or few, or many, then whenever the one, the few, or the many rule for the common bene- fit, these constitutions must be correct. But if they aim at the private benefit, whether of the one or the few or the MULTITUDE, they are deviations (for either the participants should not be called citizens, or they should share in the benefits)." (Reeve 1998, 77)

[50] This framing of the sophistic origins of the theory of self-interest is repeated in Marr and Rhodes' Introduction to *The Athenian Constitution* (2015, 16-17).

and its imperial policies. So, my hypothesis is that that the self-interest theory was specifically reworked and developed by the Athenian anti-democratic oligarchic thought collective after 431 and the outbreak of war in order to articulate and justify opposition to the rule of the *demokratia*; thus it helped to justify disloyalty, siding with Sparta, and attacking the institutions of the Athenian democracy—all key practices of the oligarchic thought style between 411 and 403.

4. **The economic analysis of empire and its ramifications**. While the Old Oligarch's account of political division in Athens in 431-424 is widely described as simplistic and exaggerated (Ste. Croix 1954; Roberts 1994, Marr and Rhodes 2015), the same cannot be said of the awareness of economic interdependencies and the analysis of the machinery of empire. In the light of 4th-century writings on economics, such as Xenophon's *Oeconomicus* and Aristotle's *Oeconomica*, which are focused on household management or raising money, the Old Oligarch's text is exceptional for its diagnoses of how the political and legal system serve the interests of the ruling social group, of how maritime power can be used for coercion, domination and imperial exploitation, and of how the necessities associated with creating and maintaining a fleet were fundamentally transforming the social structure and norms of Athens. If the author was merely repeating analyses that had become commonplace in his social network, as Marr and Rhodes suggest, this suggests that a certain section of the Athenian elite was conscious of—and acutely concerned by—these economic entanglements. As I argued in the previous section, these concerns are evident in Socrates and Critias' obsessive focus on craftsmen throughout the *Charmides*. These economic grievances can also be construed as the trigger for the reflections on the division of labour and the optimal organisation of the polis in the *Republic*.

The Empire side-lines the hoplites. The Old Oligarch recognises that the imperial democracy has fundamentally transformed the traditional power relations in Athens:

> […] it is the *demos* who operate the ships and who confer its strength on the city; the steersmen, the boatswains, the lieutenants, the look-outs and the naval engineers – these are the people who confer its strength on the city, much more so than the hoplites and the well-born and the valuable. (1.2) (Marr and Rhodes 2015, 37).

Athenian naval supremacy is inseparable from the labour of thetes and the empowerment of this class is explicitly identified with a devaluation of the hoplite class and the nobles. Furthermore, the needs of the fleet entails a demand for specialised labour, and thus another

social group acquires status and preferential treatment: "[…] the city needs metics because of the great number of their skills and the requirements of the fleet. So that is why we have, naturally, established equality of free speech for the metics too" (1.12) (Marr and Rhodes 2105, 41). According to the Old Oligarch, this transformation has led to a kind of levelling and the collapse of social norms: the *demos*, metics (free non-citizen residents) and slaves all dress alike and are indistinguishable; they do not step aside for nobles; metics can speak freely, like citizens.

The Empire rules through economic coercion. The Old Oligarch takes it for granted that, by 431-424, Athens' subject-allies have little remaining autonomy:

> As for those states subject to Athens' rule which are situated on the mainland, the big ones are kept in subjection through fear, the small ones very much so through need. For there is no state which does not need to import or export something, and these activities will not be open to it, unless it is compliant with the rulers of the sea. (2.3) (Marr and Rhodes 2015, 45)

This state of affairs is attributed to Athens' naval presence and policies, such as the requirement that the subject-allies' lawsuits have to be heard in Athens (which, the author concludes, makes them the slaves of the Athenian *demos,* who are paid for their jury service (1.16)).

> They alone of Greeks and non-Greeks are able to possess naval wealth. For if some city is rich in timber for shipbuilding, where will it dispose of it, if it does not have the consent of the ruler of the sea? What if a city is rich in iron or copper or flax? Where will it dispose of it, if it does not have the consent of the ruler of the sea? And yet it is from these very materials that I get my ships, taking timber from one place, iron from another, copper from another, flax from another, and wax from another. Furthermore, they will prevent any of our rivals from transporting these materials as a cargo to any other place, with the threat that, otherwise, they will be stopped from using the sea at all. Thus, despite producing nothing from my land, I possess all these materials because of the sea. (2.11-12) (Marr and Rhodes 2015, 47)

One interesting aspect of this characterisation is the suggestion that Athens has ceased to be a productive agrarian economy ("despite producing nothing from my land"), which links back to the assertion that the hoplite class had been side-lined (1.2). The Athenian pursuit of naval wealth is thus portrayed as not just involving a shift from an agrarian economy to an economy based on import and export, but also on controlling trade between other *poleis*.

The Old Oligarch's analysis thus stands in stark contrast de Ste. Croix's (1954) framing of the Athenian Empire as a popular Panhellenic assertion of the power of the *demos* against the propertied class, which—given de Ste Croix's comparison of Athenian sense of "democratic" with the Soviet sense (1954, 23)—conjures up images of the democratic revolution being exported across the seas during the 5th century. From the Old Oligarch's perspective, the Athenian *demos* simply used the empire as an instrument of subjugation and exploitation:

> […] the common people think that it is more of a good thing that each and every Athenian should individually own the resources of their allies, and that they, the allies, should have only what is enough to survive on, and should continue to cultivate the land, but without being able to plot revolt. (1.15) (Marr and Rhodes 2015, 43).

In other words, there was little solidarity with the *demos* across the Aegean and beyond.

The Old Oligarch's supposedly "cynical" view of the Athenian Empire as ruthlessly expansionist and exploitative was rejected by Meiggs, who concluded:

> From such evidence as we have it would be dangerous to conclude that the Athenians drained the wealth of the Aegean world and exploited the allies to improve their own standard of living. Athens' secure control of the seas increased the total volume of trade, but though Athens was the main beneficiary others shared the benefits. (1972, 272)

As was mentioned, this rose-tinted view of the Athenian *arche* has been subjected to criticism (relatively) recently, by Kallet, who argued that the imperial democracy not only continued existing exploitative practices but took them to a whole new level in terms of "success and scale" (2013, 54).

To sum up, the Old Oligarch's treatise discursively constructs an enemy that is both local and universal: on the local level, the target of antagonism is Athenian *demos* and the *oligoi* who engage with and profit from the Athenian *demokratia*; but the antagonism is extended to all Greek *poleis*, so that Athenian *oligoi* who are (justly) opposed to the empowerment of the *demos* can align with the *oligoi* from other *poleis*. The theory of self-interest has been modified by a specific Athenian oligarchic thought collective to identify all the institutions, machinery and practices of the *demokratia* (the law courts, jury service, the empowerment of the thetes and preferential treatment of metics, the expansionist and coercive empire) as geared towards

the interests of the *demos*, which justifies opposition, disloyalty, and ultimately siding with Sparta, as such practices will ultimately further the interests of the *oligoi*.

Thucydides – stuck in the middle

On the basis of the previous reflections, I would suggest that Thucydides' *History of the Peloponnesian War* can be viewed as an offshoot of the oligarchic thought style identified above. Thucydides' few authorial comments, such as those made in the excursus on stasis (3.82-84), as well as the general heft of his representations and arguments, indicate that he adopted a position in the discursive field that was both highly critical of the Athenian democracy (particularly its imperial practices and the policies of post-Periclean demagogues) and of the representatives of extreme oligarchy (their secretive, treacherous and violent practices). Thucydides can be identified as articulating a position "in the middle" (3.82.0), between the two factional extremes that he condemns, but this position of moderation—bearing in mind Herodotus' scale ranging from the broad extreme of democracy and *isonomia*, narrowing down through oligarchy to the narrowest extreme of monarchy—is in fact a position of moderate oligarchy, which is made explicit in Thucydides' positive account of the "good government" of the Five Thousand 411-10 (8.97). Hence this is the provisional basis for describing Thucydides' text as a communication of the Athenian oligarchic thought style. The key elements of this manifestation of the thought style can only be outlined at this point.

1. **The Athenian Empire as a tyranny**. Thucydides has both the enemies of Athens and its own representatives describe the Athenian Empire as a form of tyranny. Thus, for example, the Corinthian envoy accuses the Athenians of enslaving states and steadily encroaching on their neighbours (1.68-69), and the Corinthians subsequently describe Athens as "a tyrant city" that threatens the whole of Greece (1.122, 124).

Then, in his 'last speech' (2.60-64), Pericles himself is portrayed as recognising that the Athenian Empire is a kind of tyranny:

> You all take pride in the prestige the city enjoys from empire, and you should be prepared to fight in defence of it. You cannot shirk the burden without abandoning also your pursuit of the glory. Do not think that the only issue at stake is slavery or freedom: there is also loss of empire, and the danger from the hatred incurred under your rule. You no longer have the option to abdicate from your empire, should anyone out of present fear affect this idea as a noble-sounding means of disengagement. The empire you possess is by now like a tyranny [ὡς τυραννίδα γὰρ ἤδη ἔχετε αὐτήν]—perhaps wrong to acquire it, but certainly dangerous to let it go. If people of that sort

managed to persuade the others they would quickly ruin a city, and even if they set up their own independent state somewhere they would ruin that too. The disengaged can survive only when men of action are ranked beside them. Their policy has no place in an imperial state, but it belongs in a subject city, and what it means is safe servitude. (2.63) (Hammond 2009, 104)

The key points here are, firstly, that Thucydides' Pericles asserts that *all* Athenians take pride in the empire (Hornblower 1991, 337); secondly, the acknowledgement that Athenian hegemony is *like* a tyranny (τὒραννίς – *turannís*), one that is hated by those subject to its rule; and, thirdly, that some Athenians, as a result of the Peloponnesian invasions, devastation and plague (2.59), seem to have been advocating disengaging from the empire and hegemony, and perhaps even suggesting setting up their own new state.

Thucydides has Cleon echo this theme of tyranny when, following the revolt of Mytilene, he argues for brutal measures (killing all the adult males, enslaving the women and children), and addresses the Athenians: "You do not reflect that your empire is a tyranny, exercised over unwilling subjects who will conspire against you. Their obedience is not won by concessions, made to your own detriment, but by a domination based on force rather than popularity" (3.37). It is telling that Thucydides, attributes the characterisation of the empire as a tyranny to both Pericles—the personification of the radical democracy, yet a statesman whom he clearly admired—and Cleon, a demagogic hardliner whom he clearly despised.

Thucydides' account of how the Athenians came to take the *hegemonia* from Sparta in his "Pentecontaetia" focuses on the shift in Athens' treatment of the islands in the Aegean, the city-states in Ionia, Thrace and the Hellespontine region: from the "autonomous allies" (1.97) of the defensive Delian League to the subject-allies under the increasingly coercive and often brutal control of the *arche*. This shift has been much discussed in the scholarly literature (e.g. Croix 1954; Meiggs 1972; Kallet 2013, 2018); here it will suffice to highlight that Thucydides explicitly frames Athenian practices as coercive, oppressive and contrary to established Greek norms (e.g. enslaving populations, after revolts were crushed) (1.98-99). Furthermore, the Athenian approach is explicitly contrasted with that of the Spartans:

The Spartan hegemony did not involve the imposition of tribute on their allies, but they took care to ensure oligarchic rule exclusively in their own interest: whereas the Athenians in time came to deprive all subject cities of their ships and require payment of tribute, with the exceptions of Chios and Lesbos (1.19) (Hammond 2009, 11)

Thus, while Thucydides ultimately blames the outbreak of the Peloponnesian War on Spartan fear of the growth of Athenian power (1. 88), his narrative carefully builds the case that this fear was justified. At the very least, Thucydides' account indicates the perception that the Athenian hegemony was maintained through exploitation and coercion was shared across contemporary thought collectives—from the bitterest enemies to the democratic statesmen responsible for Athens' imperial policies and military strategies.

2. **The theory of self-interest as a defence of imperialism**. Thucydides has the Athenian envoy at Sparta explicitly defend the Athenian hegemony with reference to the theory of self-interest, which is now grounded in appeals to typical behaviour, established practice and the rule of the stronger:

> In the same way, there is nothing remarkable or contrary to normal human behaviour in what we have done, just because we accepted an empire when one was offered and then declined to let it go, overcome by these strongest of all motives – honour, fear and self-interest. Nor were we the first to take this course but it has always been established practice for the weaker to be ruled by the stronger. Besides, we believed ourselves worthy of this role and you agreed, until now when in a calculation of your own interests you started appealing to "justice" – though no one ever let that consideration stop them getting an advantage when presented with an opportunity to gain something by force. (1. 76) (Mynott 2013, 46-47) [51]

Here, Thucydides appears to be invoking the "the natural right of the stronger to act as he would" (Gomme 1945, 236). Whether or not this articulation invokes the supposedly sophistic doctrine of 'might is right',[52] it is evident that the Athenian speaker gives expression to a theoretical framework that justifies the use of violent, coercive and exploitative practices in the pursuit of self-interest.

Thus, in addition to the Old Oligarch's use of the theory of self-interest to justify oligarchic opposition to the *demos*, Thucydides' representation suggests the theory of self-interest had become part of the "the existing fund of knowledge" (Fleck 1935a [1979], 38) and could be drawn on by all elite thought collectives in their articulatory practices—e.g., to justify hegemony and the encroachment upon neighbouring city-states. Of course, Thucydides may

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[51] I have quoted Mynott's translation because of the emphasis on typical human behaviour and established practice rather than "human nature", the phrase chosen by Hammond (2009, 38). Hornblower argues that since Thucydides does not use the term φύσις in this passage, it is implausible to suggest Thucydides is referring to the phusis/nomos debate or theory (Hornblower 1991, 121-122).

[52] Hornblower argues that it does not (1991, 121). A more explicit Athenian articulation of the 'might is right' doctrine can be construed from the Melian Dialogue (5.89).

have added or projected these theoretical elements to the speech of the Athenian representative—there are no alternative accounts, so we have no way of peering behind Thucydides' representation. All we can conclude is that Thucydides believed, or wanted his audience to believe, that the theory of self-interest was a commonplace and multi-purpose conceptual framework.

3. **Polarisation and socio-cultural trauma**. While the Old Oligarch focuses on an Athens bitterly divided by class and intra-class antagonism, Thucydides' despairing gaze wanders far from the city walls of Athens to describe a Greek world polarised on two levels: the devastating and interminable war between the Peloponnesian League and the Athenian alliance, and numerous civil wars that erupt between factions that side with Athens or Sparta. Thucydides' account marks a shift from the antagonistic and coercive practices described in the Old Oligarch's text to the violent practices unleashed by outright war:

> That is how savagely the civil war progressed, and it was the more shocking for being the first of the revolutions. Because later virtually the whole of the Greek world suffered this convulsion: everywhere there were internal divisions such that the democratic leaders called in the Athenians and the oligarchs called in the Spartans […] So then civil war spread among the cities, and those who came to it later took lessons, it seems, from the precedents and progressed to new and far greater extremes in the ingenuity of their machinations and the atrocity of their reprisals. (3.83) (Hammond 2009, 169-170)

At the same time, Thucydides stresses how important discursive practices were for the purposes of justification and persuasion, once the descent into depravity had begun:

> They reversed the usual evaluative force of words to suit their own assessment of actions. Thus reckless daring was considered bravery for the cause; far-sighted caution was simply a plausible face of cowardice; restraint was a cover for lack of courage […] The dominant men on each side in the various cities employed fine-sounding terms, claiming espousal either of democratic rights for all or of a conservative aristocracy, but the public whose interests they professed to serve were in fact their ultimate prize. (3.83) (Hammond 2009, 170-171)

Thus in wartime, the articulatory practices of persuasion become intertwined with violent actions.

Back in 1929, Charles Cochrane argued that Thucydides' approach to history and his method for the analysis of society was profoundly influenced by the Hippocratic school: like

the authors of the Hippocratic texts, Thucydides assumes that "all human actions and sufferings are subject to natural causes" and attempts to explain them on this basis (Cochrane 1929, 17). Thus, just as Thucydides' famous account of the outbreak the plague at Athens in 430 (2.47-55) provides a detailed description of the symptoms and consequences of the plague as it spread through Athens, his analysis of war and civil strife is couched in medical terms, as an "infliction" (Hornblower 1991, 480). Human nature is viewed as "a relatively uniform and stable entity" that is subject to varying circumstances, and stasis or civil strife is described as a contagion that spreads through the body politic and the Hellenic world (Cochrane 1929, 19, 133).

While Thucydides' method and style were influenced by the dispassionate analysis of Hippocratic medicine, his historical account was evidently deeply affected by the events he described (e.g., the evocation of unparalleled suffering, desolation and widespread death in 1.23). As Roberts observed: "[…] he approached his work with a curious blend of clinical detachment and missionary zeal. Tremendous anguish and ambivalence underlie Thucydides' writing. The principal process under scrutiny in his *History* is the progressive decay of his native polis" (1994). The 27-year-long disaster of war is primarily blamed on human nature and emotions, and secondarily on collectives succumbing to these emotions—thus the Spartan oligarchy succumbs to fear, the Athenians are driven by greed, and the civil strife is perpetuated by resentment and cycles of vengeance); however, the use of words and persuasion to trigger decision and action is constantly emphasised as a key factor.

4. **The organisational and ruling practices of the oligarchic thought collective**. Thucydides' account of the oligarchic coup of 411-10 sheds some light on how the oligarchic thought collective communicated and put their ideas into practice, and on some key characteristics of the practices they employed when ruling.

Many causal factors and triggers are identified in the lead up to the oligarchic coup: Thucydides' account focuses on the Athenian defeat and loss of men and ships in the Sicilian disaster, the lack of money in the treasury (8.1), the machinations of Alcibiades, who promised the Persian satrap Tissaphernes and the Greek *beltistoi* that he would return to Athens if an oligarchy was set up in place of "the villainous democracy that had driven him out" (8.47.2) (Hornblower 2008, 893), and the oligarchic revolt at Samos. Kagan draws on various mid-20th century studies on manpower and population to stress the economic roots of the coup: by 411, Athens had a catastrophically reduced population due to the plague, years of war, and the Sicilian disaster, and this factor, combined with the inability to squeeze more funds from the subject-allies, many of whom were in open revolt, resulted in an intolerable fiscal burden being

placed on the propertied classes of Athens, whose farms had been ravaged and abandoned (Kagan 1987, 2-4).

In Thucydides' account, the attempt to destroy the Athenian democracy and establish an oligarchy (8.47-8), was made possible by the existence of a network of political clubs (*hetaireiai*) and sworn associations (*synōmosiai*) across the allied city-states (Hornblower 2008, 916-7) and in Athens. The instigators of the coup, Phrynichus and Peisander, are described as sending letters to and communicating with these associations, which enabled Peisander to sail "along the coast, unseating the popular parties from power", so that when they arrived at Athens "they found that most of their work had already been done by their associates". It transpires that this "work" entailed the killing of popular leaders and other "inconvenient people" (8.65) (Mynott 2013, 549). This aligns with Fleck's descriptions of esoteric communication within specific thought collectives (1935a [1979, 105-7).

Thucydides describes the key practices of the oligarchs who sought to destroy the *demokratia*: the killing of opponents; the prevention of criticism through intimidation; the suspension of legal enforcement—"Anyone who did speak out against them met with a sudden death in some convenient way; and there was neither any search for the perpetrators of the deed nor any legal action taken against suspects" (8.66.2) (Mynott 2013, 550); disseminating distrust (8.66.5); suspending the procedures of the *demokratia* to enact a resolution to disenfranchise citizens (narrowing the constitution to the Four Hundred) (8.67); seizing the council building with the threat of violence (8.69); imprisoning and banishing opponents; opening negotiations with the Spartans, and eventually planning to give the city over to the Spartans (8.91.3).

Thucydides' account of how the Four Hundred were defeated and replaced by the broader, "moderate" oligarchy of the Five Thousand echoes key elements of the Old Oligarch's picture of the Athenian social structure and allegiances: the popular party and the "inveterate opponents of oligarchy" (8.73.5) (Mynott 2013, 555) are identified with the fleet and the thete class who man the ships, so that in effect the *demos* was literally at sea while the extreme oligarchs ruled Athens. The critical factors leading to end of the Four Hundred were an intra-class split between the extreme and moderate oligarchs (8.89), the extreme oligarchs' treason as the Peloponnesian fleet approached the Piraeus, and the hoplites in working on the fortifications at Piraeus finally siding with the moderate Oligarchs due to the promise of broader enfranchisement under the Five Thousand, since this body would "consist of all those who could provide their own hoplite armour" (8.97.1) (Mynott 2013, 572). Thus, the eventual restoration of the democracy was achieved by an alignment between "dissidents" (Kagan 1987, 189), i.e. pro-democratic oligarchs, and the hoplite class (*zeugitae*) whose economic side-lining

the Old Oligarch had bemoaned (Ath. Pol. 1.2). Thucydides' account also positions the role of the Piraeus, the bastion of the metics and the "urban proletariat" (Gomme 1938, 98), as crucial. Thus consistencies can be identified in the representations of collectives, networks, antagonisms and practices.

Consistencies can also be found in later accounts. Most importantly for the purposes of the present study, Xenophon's account of the rule of the Thirty in 404-403 (*Hellenica* Book 2), represents Critias and the other oligarchs as adopting exactly the same practices as those employed by the Four Hundred, but with even more violence, and the addition of property seizure. Hence they are described as appointing a Senate without any public consultation; arresting, prosecuting and executing democrats, as well as moderate oligarchs who opposed them; installing a Spartan garrison; killing metics and appropriating their property; confiscating arms and convening the Senate with young men with concealed daggers in attendance; and disenfranchising citizens and evicting them from their estates etc. (Hell.2.3-4).

The Aristotelian *The Athenian Constitution*, which—as was mentioned—completely suppresses any mention of Critias—provides a more condensed and depersonalised account of the Thirty, focusing on their attack on the constitution, and concluding with the following description of their practices:

> They eliminated malicious prosecutors, and those who curried favour with the people contrary to what was best and were harmful and wicked; and the city was pleased with these achievements, thinking that the Thirty were acting from good motives. But when they had a firmer hold on the city they left none of the citizens alone, but put to death those who were outstanding for their wealth, birth or reputation, cunningly removing those whom they had cause to fear and whose property they wanted to plunder. Within a short space of time they had killed no fewer than fifteen hundred. (35.3-4) (Rhodes 2002)

So this version of events adds two more elements of the extreme oligarchs' practices: deceptively hiding their true agenda, and appealing to the worst instincts of the populace.

According to the sources, the defining characteristic of the oligarchic thought style in its extreme manifestations between 411 and 403 was thus the transition from the practices associated with purely spoken and written antagonism, e.g., discussions and speeches at secret political associations, the circulation of letters and treatises, to the use of violence and intimidation. Wolpert concluded:

we can find significant agreement in our sources which is worth emphasizing. They are in complete accord about the brutality of the oligarchy: violence created, sustained, and destroyed the regime. But unlike Xenophon, who represents the reign of terror as senseless, and Aristotle, who shows it to be a reaction to internal and external threats, I argue that it was systemic. The Thirty depended upon violence to seize power, to rid the community of the previous political culture, and to block opposition. (Wolpert 2002, 16)

The rejection of the *demokratia* ultimately came to entail the rejection of the norms and cultural practices that were associated with this broad constitution.

Conclusion

The Athenian texts covered above—as well as others that have not, such as Aristophanes' *The Archanians*, *The Knights*, *Lysistrata*, and Euripides' ironic tragedies, such as *The Suppliant Women* and *Orestes*—indicate that the period between 432 and 403, the temporal span indicated by Plato's *Charmides*, was a period of extreme social unrest. The source texts explicitly describe antagonisms occurring at the local level: between groups occupying different positions in the social hierarchy, and between different factions occupying the same rank; then these antagonisms are situated in a broader struggle for hegemony over the Greek world. This conflict is predominantly framed as a political struggle over competing constitutional models, i.e., over whether power should be shared with a broad section of the populace (the *demos* composed of male citizens) or restricted to a narrow elite (the *oligoi*). The economic dimension underlying the political struggles is registered with varying degrees of explicitness, ranging from the Old Oligarch's focus on the gains of the *demos* and the metics, and the empire's control of trade, to Thucydides' references to self-interest and revenue collection, to Aristophanes' depictions of struggling farmers (*The Archanians*) but thriving sausage-, hemp- leather-, sheep-sellers etc. (*Knights* 128-148).

Scholarly studies of the period have brought to light new dimensions of this already multidimensional conflict: the intergenerational conflict between traditional oral culture and scientific written culture (Havelock); the rise of the urban *polis* based on the exploitation of slave labour in the countryside (Anderson 1974); a broader conflict between two linguistic and cultural groups (Dorian vs. Ionian) (Powell 1988, 43); a conflict between different discursive practices—the elite-elite communication of e.g., Thucydides and Plato vs. the elite-mass communication of public oratory (Ober 1989).

Thus, on the basis of contemporary and modern accounts, the period of 432-403 BC clearly qualifies as a period characterised by the kind of social and intellectual unrest that Fleck's theory requires for the emergence of a new thought style (Fleck 1936b [1979] 76-77). I suggest that a new thought style began emerging among a certain section of the Athenian elite due to its loss of status, control over the means of production, and power, due to the empowerment of the thetes and metics (i.e., skilled labour) that came with the reorientation of the Athenian economy towards commerce, monetisation and imperial exploitation.

Fleck's theory also posits that the circulation of ideas between distinct thought collectives is a factor which contributes to the emergence of a new thought style (Fleck 1936 [1986], 87). My analysis of the Old Oligarch's treatise and Thucydides' *History* suggest that the theory of self-interest was communicated across thought collectives, perhaps from sophistic wisdom-performances, and was clearly developed by the Athenian elite for their own discursive purposes, and by the thought collective of the anti-democratic *oligoi* to allow them to define their interests in opposition to those of the *demokratia*. Thucydides' 'scientific' analysis of polarised Greek poleis was also clearly influenced by another distinct thought style—the Hippocratic school and its theory of causality.

In the *Charmides*, Plato portrays Socrates, Critias and Charmides analysing the inherited proto-idea of *sophrosyne*, and Critias is shown adapting the concept to the contemporary context, to argue that one should not transgress the social norms constitutive of one's social position. As the above analysis has shown, this was precisely the problem for the anti-democratic oligarchic thought collective as the Peloponnesian War was breaking out: the *demos* and the *metoikoi* had been allowed to rise out of the position assigned to them in traditional society, and the *oligoi* and *zeugitai* had fallen in importance as a consequence. On a broader level, Athens, by pursuing its expansionist *arche*, was transgressing the norms applicable to a Greek *polis*.

Thus, to reiterate on the basis of the above analysis of the Athenian oligarchic thought collective, in the *Charmides* Plato can be construed as depicting the representatives of a specific, historical thought collective and as dramatizing their thought style in action. Socrates and Critias are both shown to be preoccupied with controlling and supervising the knowledge practices and craft production that are clearly now beyond the control of their class. Plato's audience—traumatised by decades of war, disaster and coups, and the loss of Athenian hegemony and status—would have been all too aware that Critias resorted to violence and seized control of Athens. Socrates stands in explicit contrast to Critias' treachery: crucially, the opening of the *Charmides* emphasises Socrates' loyalty to the ruling *demokratia*: he has just

returned from fighting for the empire, having participated in crushing the revolt of the subject-ally Potidaea. In other words, he is a loyal opponent of the regime: "an obedient dissident; a critic of democratic culture who takes up public office and is a stickler for the legal rules" (Ober 2017, 84). Plato thus positions Socrates as the alternative to resorting to violence and seizing power in the name of self-interest and on the basis of claims to self-evident elite knowledge.

In the next section, I argue that Plato continues and develops the Athenian oligarchic thought style in the *Republic* by adopting a new strategy: focusing on the control of cultural production, through the control of education (*paideia*)

4.2.4 The *Republic* and the Control of Cultural Production

Injustice and collective trauma

In the light of the above analyses of the *Charmides* and the texts articulating the oligarchic thought style, it is perhaps no accident that the *Republic* begins with Socrates returning from the Piraeus, the harbour area associated with the fleet, the power of the *demos*, and the skilled labour of the metics. In fact, the conversation takes place in the house of Cephalus, a rich and successful metic from Syracuse (Carawan 2013, 9), who participates in the conversation when it concerns money and sex, but leaves the conversation to his son Polemarchus when the topic turns to justice and becomes more abstract (331d). Thus the overall conversational structure of the *Republic* can be read as an ascent from the lowest levels (the Piraeus, metics, sex, money) to the highest level of dialectical conversation with Plato's aristocratic brothers, but also as a process of exclusion which removes metics (Cephalus, Polemarchus) and a foreign sophist (Thrasymachus) along the way.

Without analysing the details of Thrasymachus' articulation of the theory of self-interest or Socrates' refutations, the key functions of this passage can be suggested. Firstly, Thrasymachus articulates—or rearticulates for Plato's contemporaries—the discursive issues that preoccupied the Athenian elite in the 430s and 420s: the idea that the strong rule to their own advantage (338c, but more precisely 341a), that the three possible constitutions are tyranny, democracy and aristocracy (338d)—the use of *aristokratia* rather than *oligarchia* may suggest that after 403 the latter term was avoided; and the idea that each kind of constitution serves those who rule (338d-e). Socrates' responses to Thrasymachus' arguments begin to distinguish his philosophy from the oligarchic thought associated with Critias and the Thirty: a ruler is like a good craftsman and does not rule for his own advantage, but for the advantage of his subjects (342d-e). Thrasymachus' counter argument that injustice brings more advantages

than justice seems to contain a direct reference to Critias and the Thirty Tyrants: "And this is tyranny, which both by stealth and by force takes away what belongs to others, both sacred and profane, both private and public, not little by little but at one swoop"[53] (344a). Socrates' eventual response to this argument makes similarly direct references to the Athenian Empire "A city, you would say, may be unjust and try to enslave other cities unjustly, have them enslaved and hold many of them in subjection" (351a-b), and the civil strife that spread through the Greek city-states during the Peloponnesian War:

> "For factions, Thrasymachus, are the outcome of injustice, and hatreds and internecine conflicts, but justice brings oneness of mind and love. Is it not so?"
>
> "So be it," he replied, "not to differ from you."
>
> "That is good of you, my friend; but tell me this: if it is the business of injustice to engender hatred wherever it is found, will it not, when it springs up either among freemen or slaves, cause them to hate and be at strife with one another, and make them incapable of effective action in common?" (351d-e)

Without having defined justice as yet, Socrates' asserts that the theory of self-interest and the strong ruling to their own advantage lead to injustice and warring factions within the *polis* and the individual (352a). Cooperation and "self-agreement" become impossible; nothing can be accomplished. In effect, Socrates silences Thrasymachus by invoking the threat and associations of civil strife rather than by dialectical argument. It can perhaps be argued that for Plato's contemporaries, Socrates' references to civil strife would have triggered associations of recent collective trauma. In any case, immediately after Thrasymachus makes his final utterance, Socrates admits they haven't answered the question of what justice is (354b-c).

Crafts, goods and production

The interactions with Polemarchus and Thrasymachus also serve to reintroduce the concerns articulated in the *Charmides*: the classification of certain practices (medicine, cooking, captaincy, music, soldiering, shepherding) as crafts (*technai*), the problem that knowledge fails and craftsmen seem to make errors (340e), and the argument that crafts compensate for

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[53] Unless otherwise indicated, all English translations are taken from Plato. *Plato in Twelve Volumes, Vols. 5 & 6* translated by Paul Shorey. Cambridge, MA, Harvard University Press. 1969. Available online at https://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0168, with the Greek: Plato. *Platonis Opera*, ed. John Burnet. Oxford University Press. 1903.
https://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0167

deficiencies and produce benefits (341e-342c, 346c). Socrates explicitly asserts that justice is a craft (332d), and that rulers practice the craft of ruling for the benefit of their subjects (342e), and implies that the craft of justice is what makes it possible for the city and the individual to have a unified purpose and achieve anything (351c-352a).

With Polemarchus and Thrasymachus now silent, Socrates, Glaucon and Adeimantus begin defining justice. Glaucon shifts the emphasis from crafts to goods (*agatha*), and Socrates classes justice among the finest kind of good—one that is valued in and of itself (357d-358a). Glaucon puts forward the argument that people do not practice justice for its own sake, but for the sake of reputation and consequences: just as a clever craftsman's errors go undetected, an unjust man can have a reputation for justice (360e-361b). Adeimantus' contribution, which contains a slew of references to Homer, Hesiod, Musaeus, and Pindar, introduces the topic of poetic representations of injustice as beneficial; and this leads to the key question, namely the effect of such representations on young men:

> "What, Socrates, do we suppose is the effect of all such sayings about the esteem in which men and gods hold virtue and vice upon the souls that hear them, the souls of young men who are quick-witted and capable of flitting, as it were, from one expression of opinion to another and inferring from them all the character and the path whereby a man would lead the best life? […]" (365a-b)

Socrates' response to the task set by Glaucon and Adeimantus—namely to explain why justice is good in and of itself, and why injustice is bad; without appealing to reputation or consequences—and to Adeimantus' question about the effect of poetry on the young, is to embark on an extended analysis of material and cultural production in the *polis* (369a).

The hypothetical *polis* constructed by Socrates is far from Spartan: it relies on imports and exports, so, in addition to farmers and craftsmen, it also needs merchants, retailers, money and labourers (370e-371e). Following Glaucon's prompting, Socrates goes further and allows that it will be "a luxurious city", with tables, couches, delicacies, perfumed oils etc. In fact, it will be filled with many things that go beyond what is necessary, entailing a plethora of professions, including those connected with the arts: "the poets and their assistants, rhapsodists, actors, chorus-dancers […]"(373b). In other words, the hypothetical *polis* comes to resemble Athens, especially as expansion is viewed as inevitable, once the unlimited acquisition of wealth becomes the overriding aim: "Then we shall have to cut out a cantle of our neighbor's land if we are to have enough for pasture and ploughing […]" (373d).

The inevitability of war entails the need of guardians, who need to be trained and educated (376e). As Adeimantus has pointed out, existing poetry is full of representations of injustice… so control has to be introduced.

Republic *II: the regulation of mythos*

In the *Republic*, Plato tends to lump Homer and Hesiod together (e.g. 363a, 612b), while those who engage in diverse forms of cultural production are described as creating ψεῦδος (*pseudos*), that is, fables or fiction, but also falsehood or lies (Lee 2003) (376e), and are referred to with blanket terms, such as μυθοποίος (a maker of myth) or μυθολόγος (a teller of myth) (Moors 1982, 36), variously translated as "fabulists or poets" (Shorey 1969), the creators of "mythology and poetry" (Jowett 1991), or "writers of poetry or prose" (Griffith 2000). This is the familiar strategy of homogenisation identified and characterised in 4.2.2.

The position assigned to the creators of *pseudos* and *muthos* becomes increasingly bleak as Plato's narrative progresses. The attack on Homer and Hesiod begins with the analysis of how justice and injustice are portrayed by poets—or, more literally the 'fabricators'.[54] First, the poets are taken to task for joining lay people in describing the path of injustice as easy, and the wicked and unjust as happy, then they are associated with itinerant prophets who claim to be able to influence the will of the gods. Adeimantus (364d):

> And for all these sayings they cite the poets as witnesses, with regard to the ease and plentifulness of vice, quoting:
>
> > "Evil-doing in plenty a man shall find for the seeking;
> > Smooth is the way and it lies near at hand and is easy to enter;
> > But on the pathway of virtue the gods put sweat from the first step," Hes. WD 287-289
>
> and a certain long and uphill road. And others cite Homer as a witness to the beguiling of gods by men, since he too said:
>
> > "The gods themselves are moved by prayers,
> > And men by sacrifice and soothing vows, " And incense and libation turn their wills
> > Praying, whenever they have sinned and made transgression." Hom. Il. 9.497

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[54] λεγόμενονκαὶ ὑπὸ ποιητῶν (*Republic* 363e-365a)

These passages from *Works and Days* and *The Iliad* are deemed reprehensible in terms of their educational function: intelligent or quick-witted young men could draw the conclusion that it pays to behave unjustly and bribe the gods. This is a theme which runs throughout *The Republic*, to which Havelock repeatedly draws attention in *Preface to Plato*: Socrates and his interlocutors do not treat the fabrications of the poets as mere entertainment or intellectual titillation: poetic tales are forms of cultural production that have a definite social function and educative purpose—they maintain and transmit norms of conduct. The first prong of Plato's attack is thus to castigate the social norms conveyed in the texts of Homer and Hesiod.

The second prong of the attack comes later in Book II, when the interlocutors return to the issue of education, now cast in terms of the preparing the philosopher-guardians of a healthy, ideal State. Firstly, it is decided that education of children should introduce them to music before gymnastics; and it is acknowledged firstly that music encompasses "tales", or epic/lyric verse, and then that "tales are of two species, the one true and the other false (*pseudos*)". Secondly, *pseudos* is assigned a role in the education of young children: "'Don't you understand,' I said, 'that we begin by telling children fables (*muthos*), and the fable is, taken as a whole, false (*pseudos*), but there is truth (*alethē*) in it also? And we make use of fable with children before gymnastics'" (377a). Thus, there is a distinction between tales told in verse, which can be both true and false, and the fables (*muthos*) suitable for children, which in totality amount to falsehood, but may contain an element of the true or unconcealed.

Socrates and his interlocutors decide that they must exercise strict supervision over the makers and tellers of *mythos* (377b-c). Mothers will only be permitted to tell their children stories from the accepted list of good fables, i.e., those containing truth, while the tales that consist of bad *pseudos* will be discarded. It soon becomes apparent that with regard to the supervision of *mythos*, Socrates has the tales narrated by Homer and Hesiod in mind (2.377d), since they contain bad images of the gods (377e). Examples of those who image badly (Shorey 1969) or make erroneous representations (Jowett 1991) are specified in detail, ranging from Cronus' castration of his father Uranus in Hesiod's *Theogony* and the battles and squabbles between the gods in Homer (377e-378).

Since they have been found guilty of a) transmitting norms of conduct that could encourage injustice in society; and then of b) producing false images of the gods, if the makers of *pseudos* and *muthos*, are to have any place or role in the ideal State, their productions must be subjected to a branch of thought which is, according to Jaeger (1947, 4), distinguished for the first time in Book II of *The Republic*, namely θεολογία (*theologia*)—variously translated as

"forms of theology" (Jowett 1991), "right speech about the gods" (Shorey 1969), "patterns for stories about the gods" (Griffith 2000), and "the lines on which our poets must work when they deal with the gods" (Lee 2003). As Jaeger explains, theology involves "the approach to God or the gods (*theoi*) by means of the *logos*" ; and it is clear that this approach is made at the expense of the makers of *pseudos* and *mythos*. The emergence of this new branch of thought is immediately followed by a rule or law which the poets would be obliged to follow:

> And I replied, "Adeimantus, we are not poets, you and I at present, but founders of a state. And to founders it pertains to know the patterns on which poets must compose their fables and from which their poems must not be allowed to deviate; but the founders are not required themselves to compose fables."
>
> "Right," he said; "but this very thing—the patterns or norms of right speech about the gods, what would they be?"
>
> "Something like this," I said. "The true quality of God we must always surely attribute to him whether we compose in epic, melic, or tragic verse."
>
> "We must."
>
> "And is not God of course good in reality and always to be spoken of as such?" (379a).

It is notable that as the dialogue progresses, and the intentions of the interlocutors become increasingly draconian, the focus shifts from the plural form of gods (θεῶν)(377e) to the singular form of God (θεὸς) (379a). In Book II of *The Republic*, the proposed legislative supervision over the makers of *muthos* has imposed strict requirements on their productions: to meet state approval, their fables must contain good falsehoods, and their tales told in epic or lyric verse must represent the deity, *theos,* as he truly is, that is, as good. Nevertheless, despite being subject to such draconian restrictions, the makers of *mythos* are still assigned a role and place in the ideal state emerging in the Socratic dialogue.

Republic X: Mimesis & Deception

In Book X, when Plato deploys the theory of mimesis to assign an ontological status to the products of various makers or craftsmen, the position of the makers of epic and lyric verse, and of the makers tragedies and comedies, becomes particularly dire. It is noteworthy that at this point of the Republic, when the principles for the ideal state have been laid down, through the supporting framework of the 'metaphor of the sun', the 'analogy of the divided line' and the 'allegory of the cave'—which subsequently came to be associated with Plato's theory of

knowledge or epistemology—the theory of mimesis draws on this theoretical framework to explicitly put 'poetry' on trial (Levin 2001).

This judicial process is no accidental metaphor. Just as the subject-allies of Athens in the Delian League were obliged to submit their appeals before an Athenian law-court (Meiggs 1972, 179-180), Plato's *Republic* brings the Ionian *mythos* of Homer to Athens to face judgment before a jury of philosophers. The prosecution brings the combined resources of the conceptual apparatus erected by Socrates throughout the dialogue and the institutions and procedures of the Athenian legal system to bear on the 'makers of tragedies', with Homer at their head. Throughout the trial, Socrates behaves as the presiding magistrate, steering the procedure, while his interlocutors function as a panel of *dikastes*—judges/jurors who collectively determine guilt (Carey 1997, 5-7).

Thus, while (the singular) God made the one, original true bed or couch (κλίνη - *klinē*), "which really and in itself is" (597c), and a carpenter creates a bed in imitation of this form, and a painter imitates this imitation, and is thus "the producer of the product three removes from nature" (597e), the maker of tragedies (*tragōidopoios*) is also deemed to be an imitator who "is in his nature three removes from the king and the truth". Once this status has been assigned to tragedy, this entitles Socrates and his interlocutors to put forward the case against poetry. Two main charges can be identified.

The first is that of deception, which echoes the association of *muthos* with *pseudos* from Book II. Just as painters can use their imitations to trick people into thinking they have created the real thing (598c), Homer and other makers of tragedy deceive their audiences with imitations of virtue and vice (598e), when in fact they make "phantoms, not realities"(599a). This leads to the extraordinary assertion, given the status of Homer's poetry in Athenian culture and its role in education, that Homer did not have genuine knowledge of the things he imitates, such as war, generalship, administration and education. This culminates in a direct challenge to Homer himself:

> "Friend Homer, if you are not at the third remove from truth and reality in human excellence, being merely that creator of phantoms whom we defined as the imitator, but if you are even in the second place and were capable of knowing what pursuits make men better or worse in private or public life, tell us what city was better governed owing to you, even as Lacedaemon was because of Lycurgus, and many other cities great and small because of other legislators. But what city credits you with having been a good legislator and having benefited them? Italy and Sicily say this of Charondas and we of Solon. But who says it of you?" (599d-e)

This is followed by further scathing attacks on the person of Homer (e.g. that he was not a renowned sage like Thales, is not credited with public service, had no followers etc. (600a-e)).

Republic X: Mimesis and the Inferior Part of the Soul

The second charge brings one more doctrine into play, namely the theory of the soul gradually introduced throughout *Republic* (e.g. Books 4, 8 and 9), which posits that the soul is divided; a battleground over which the competing aspects of reason, spirt and appetite seek to dominate. In Book X, this theory of the soul is coupled with the theory of *mímēsis* to put forward the accusation that the imitation of the poets is addressed to the feelings or passions, and thus should be banished from the *polis*, or the ideal State.

Plato's argument proceeds by drawing on the epistemological framework established over the course of the dialogue. Thus the sense of sight is identified as liable to deception and contradiction (a straight object looks crooked in water), but such contractions can be resolved by "the part of the soul that reasons and calculates" (602e), which is identified as "the best part of the soul", while the part of the soul with holds opinions that contradict the calculations of measurement is identified as one of "the inferior elements of the soul". Since the mimetic arts produce "a product far removed from the truth", they are associated with this inferior part of the soul: "Mimetic art, then, is an inferior thing cohabiting with an inferior and engendering inferior offspring" (10.603a-b).

Since this analogy is based on vision and painting, Socrates senses the need to extend it more convincingly to "hearing and to what we call poetry" (*poiēsis*) (603b). And here Plato draws on an arsenal of concepts and legal tools in order to prosecute his case: the theory of the divided psyche, the identification of law with reason, crowd psychology, the *polis*-soul analogy, and the institution of ostracism.

The key element for justifying the ostracism of poetry is the *polis*-soul analogy. This is based on a comparison of the individual's behavior when alone with the behavior of the individual in public, and then again with the behavior of crowds at performances of tragic poetry or a comedies. As a starting point, the argument analyses behavior associated with sorrow and grieving. A person afflicted with sorrow or who is grieving will resist or struggle against this emotion when seen by their equals, but when alone will say or do things that they would be ashamed to do in public: "Now is it not reason and law (*logos* and *nomos*) that exhorts him to resist, while that which urges him to give way to his grief is the bare feeling itself?" (604a-b). Thus the rational element of the soul, *logos*, gains mastery over the soul when it is supported

by, and allied with, law or custom, *nomos*—which exerts its power over the individual through the gaze of others.

However, Socrates then argues that whereas the irrational, cowardly part of us that gives in to useless lamentation provides rich material for imitation, that the higher principle of reason which resists sorrow—somewhat oddly, given that it is supported by *nomos*—"is neither easy to imitate nor to be understood when imitated, especially by a nondescript mob assembled in the theater" (604e). This entitles Socrates to conclude that the art of the mimetic poet, like that of the painter, is aimed at the irrational, passionate part of the soul.

Once the connection mimetic poetry and the inferior part of the soul has been established, Socrates then deploys the *polis*-soul analogy to ban poets from entering the ideal State:

> And so we may at last say that we should be justified in not admitting him into a well-ordered state, because he stimulates and fosters this element in the soul, and by strengthening it tends to destroy the rational part, just as when in a state one puts bad men in power and turns the city over to them and ruins the better sort. Precisely in the same manner we shall say that the mimetic poet sets up in each individual soul a vicious constitution by fashioning phantoms far removed from reality, and by currying favor with the senseless element that cannot distinguish the greater from the less, but calls the same thing now one, now the other. (605b-c)

Just as corrupt rulers tend to corrupt citizens in a *polis*, the mimetic poet corrupts the soul of the individual. Thus good individuals who can manage their own private grief give way to sympathy when they *listen* to Homer or other tragedian, who rouse their feelings, such as pity. The more an individual sympathizes such emotions in the theatre, the more difficult it will be for the individual to control their private emotions. This further illustrated by comedy: laughing at unseemly jokes at the theatre means that one will become a buffoon at home (606c-d).

The case against poetry is summed up with an explicit attack on the status and role of Homer as the educator of Greece (606e). Socrates acknowledges Homer is the greatest poet, but repeats that in the ideal *polis* his poetry would be banned (only hymns to the gods and encomia of famous men will be permitted): "For if you grant admission to the honeyed muse in lyric or epic, pleasure and pain will be lords of your city instead of law (*nomos*) and that which shall from time to time have approved itself to the general reason (*logos*) as the best" (607a). It becomes apparent that rather than prohibiting entry (as at (605b)), the judgment had in fact been to dismiss or dispatch poetry, to send it out of the *polis.*

Socrates then famously refers to an ancient quarrel between philosophy and poetry (607c), citing some unknown fragments of poetry which appear to be critical of philosophers.[55] The judgment concludes by allowing poetry to return from exile if she can plead her defence in lyric metre, and if her defenders can show, in prose, that she is beneficial to "orderly government and the life of man" (607c).

It is noticeable that poetry is not given an opportunity to make her defence prior to her dismissal from the polis: she is judged *in absentia*, and is in a sense already banished before the trial takes place (she is said to be prohibited from entering the polis before the trial has arrived at the judgment which banishes her). Plato does not allow any of the dialogue participants to present a defence of poetry, in her absence and on her behalf—not even a token, weak defence for Socrates to demolish.

Conclusion – *philosophia* as a thought style

In the light of the previous sections, we can conclude that *philosophia*, the thought style communicated in the *Charmides*, *Phaedrus* and *Republic,* developed from a thought style communicated by a section of the Athenian elite, the *oligoi* opposed to the democracy, in the period between 431 and 403.

To recap, the oligarchic thought style of the late 5th century was characterised by discursive antagonism articulated through a reduced definition of the *demos* as the enemy; by resentment of and hostility to the metics and the skilled urban labour force that had been empowered by the Athenian Empire; by the identification of a broader conflict between the *demos* and the *oligoi* across the Greek world; by the use of the theory of self-interest to justify opposition to the Athenian *demokratia* and siding with Sparta; by the use of secret political associations and symposia to disseminate and organise opposition; and by attempts to replace the institutions and cultural practices of the demokratia with a narrow, oligarchic constitution that would return the traditional social hierarchy.

Plato's *philosophia* can be characterised as a thought style that developed from this oligarchic thought style and continued the transmission of its preoccupations, prejudices and practices. However, while the oligarchic thought collective emerged during wartime, and while its practices transitioned from purely discursive opposition to the active adoption of violent and intimidatory practices, and actually seized control and wielded power, Plato's *philosophia*

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[55] Cf. http://data.perseus.org/citations/urn:cts:greekLit:tlg0059.tlg030.perseus-eng1:10.607b and http://data.perseus.org/citations/urn:cts:greekLit:tlg0059.tlg030.perseus-eng1:10.607c

emerged during a period of trauma, when Athens had lost its hegemony and control, and was recovering from the devastation of war, coups and civil strife. Thus, rather than advocating the usurpation of the restored democracy and directly claiming the right to political rule, Plato's project focuses on cultural power; on how to dominate and control the field of cultural production. The following conclusions can be put forward:

1) the thought style developed concepts such as *technē*, *epistēmē* and *mĭmēsis* to differentiate, evaluate, and suppress different forms of cultural production and cultural practices; hence the attack on poetry and tragedy presented in Book 10 of the *Republic* was not a gratuitous appendix, as argued by (Nettleship 1987; Cornford 1941; Annas 1981), but was a core purpose of the text, as argued by (Havelock 1963; Murray 1997; Levin 2001);

2) the thought style was strategically reductive: concepts such as *muthos* and *mĭmēsis* are deployed to identify general, common features shared by heterogeneous forms of production and practice—such as fabrication, representation, persuasion—which allowed them to be treated as homogenous cultural products or practices; thus diverse forms of public communication, such as political oratory, legal speeches, sophistic lectures etc. are all reduced to one common denominator—persuasive speech, and all such forms are classed—by this every essence—as inferior to the private speech of philosophical-educational conversation (Heath 1989; Tuozzo 2011);

3) the thought style defined its style through the negative identification and characterization of other thought styles (a strategy equivalent to the discursive antagonism conceptualised by (Laclau and Mouffe 1985) and Mouffe (2005));

4) the thought style was focused on the subjugation and control of other thought styles: once their forms of communication and practices had been homogenized, assimilated (e.g. through genre hybridization (Wilson Nightingale 1995)) and/or supervised, they could be used and subordinated to *philosophia*, pilloried, silenced and excluded;

5) the thought style inherited the hostile, suspicious attitude to craftsmen and the production of goods expressed by the oligarchic thought style; the desire to rule over and supervise different forms of knowledge at the core of Plato's project;

6) more broadly, the thought style can be said to be deeply imbued with the arrogance and sense of superiority associated with the Athenian mentality (as

described in Thucydides' *History*); in particular, despite its anti-imperial origins in the oligarchic thought collective, Plato's thought style perpetuates the Athenian assertion of dominance over Ionia, but switches the focus to hegemony over Ionian culture (poetry, natural philosophy);

7) its method of argumentation was determined by, and explicitly invoked, the Athenian legal system: in the *Phaedrus* and *Republic*, Socrates and his interlocutors assume the role of *dikastes;* charges are brought, the case is argued, the judgment is made, the sentence is pronounced;

8) Plato's use of writing is a key addition to the Socratic practice of dialectical conversation, but Plato's adoption of the concept of *mĭmēsis* actually condemns his written text to the representation of the cultural practice of philosophy; his texts do not *do* philosophy, they merely represent it—the cultural practice of philosophy is defined as something that occurs outside the text, in active real-life engagement in philosophical conversation (Tuozzo 2011); to put it crudely, Plato's texts function more like advertisements than as receptacles for the truth;

9) Havelock's (1963) argument that the *Republic* marks the transition from oral culture-education based on poetry to a scientific mentality based on written prose is another iteration of the 'from mythos to logos'; one that posits the spread of literacy as a single technological-determinant triggering cultural change from mythopoetic thinking to scientific-rational thinking (Thomas 1992; Murray 1997);

10) Plato's texts were the communications of a thought style that was shaped by and responded to multiple determinants at the tail end of a traumatic period of economic transformation, war, civil strife, plague, social division and upheaval, and cultural conflict; while his texts do not have to be read in this light, if the Peloponnesian War and the oligarchic coups of 411 and 403 are not considered as determinants and explanatory factors, the rich dynamics and strategies of these immensely subtle and complex texts are simply eclipsed.

The next section will consider a thought style that was articulated in the 5th and 4th centuries, which resisted the tendencies of 'philosophia' by presenting and employing alternative knowledge practices.

4.3 Hippocratic Medicine – a Rival Thought Style, other Knowledge Practices

4.3.1 On Ancient Medicine

Ancient and modern accounts of the emergence of medicine as a distinct discourse, that is, as a social practice founded on an accumulating fund of knowledge, also testify to the emergence of alternative conceptions of rationality and knowledge practices, which were explicitly defined in opposition to the way of thinking exemplified by *philosophia*.

In *Magic, Reason and Experience* (1979), a classic—and, to my mind, unparalleled—study of the origins of Greek science, Geoffrey E.R. Lloyd provides a detailed account of how Hippocratic medicine emerged in the 5th century BC. The varied texts which have been gathered together to constitute the Hippocratic corpus are often united in purpose, namely, to distinguish Hippocratic medicine from the practices and claims of its rivals. Thus, Hippocratic texts such as *On Ancient Medicine* and *On the Sacred Disease* are polemical in nature, asserting theoretical positions and arguments in explicit opposition to magico-religious healing, the rival theories of contemporary "philosophers" (such as that of the 'Presocratic' Empedocles), and the claims and recommendations of assorted charlatans and quacks. Crucially, in the course of these polemical engagements, the Hippocratic authors testify to the existence of methods, and a body of popular remedies and practices, that had developed over centuries, and which cannot be described—either fairly or straightforwardly—as irrational (Lloyd 1979, 37-49).

In this regard, *On Ancient Medicine*, dated to between 440-350 BC, is a key text, since it emphasizes the continuity between "the ancient Art of medicine" and contemporary Hippocratic theory and practice, both of which are contrasted with the innovations of the new philosophy (sophists, Empedocles), which the author dismisses as having no connection with the art of medicine. As Jacques Jouanna observes, the position adopted by the Hippocratic author is rather "ambiguous": on the one hand the text is inscribed within the fifth-century Hellenic discourse which, in contrast to the pessimism of Hesiod's *Works and Days*, viewed history in terms of progress, as a development from savagery to civilization, and hence in this regard the author is on the same page as Protagoras, Democritus and Thucydides; yet on the other hand, the author of *On Ancient Medicine* also presents this development as gradual and cumulative, as rooted in case-by-case practice, and rejects the reductive hypotheses and search for general principles that are associated with the innovative philosophies of Empedocles and the sophists (Jouanna 1999, 232-33).

The Hippocratic author's first line of attack is the methodology of the new philosophy.

Rather than employing an "empty" or "occult" hypothesis or postulate which reductively posits one or two causes of disease (hot or cold, moist or dry) and cannot be referred to anything "to discover the truth", which can be glossed as suggesting such a hypothesis cannot be tested, the Hippocratic author announces that he will draw on the old method of Medicine, and use the evidence of its "discoveries" as the basis for investigations. The author asserts that the discoveries of medicine "cannot be made in any other way", that other forms of inquiry are impossible; thus the method developed by the old art of Medicine is essential to, and inseparable from, medicine itself. Lastly, in what appears to be a veiled attack on philosophical sophistication and abstraction, the author insists that medicine "should treat of things which are familiar to the common people": medicine deals with the real diseases that afflict ordinary people, and thus must be able to communicate with the illiterate and vulgar (HP. VM. 1-2) (Adams 1868).

The author ties the invention of the art of Medicine to a prior discovery involving increasing awareness of the properties of food, of variations in individual sensitivity to food, and the development of food preparation techniques—which Jouanna summarizes as the discovery of cooking (Jouanna 1999, 234). In the Hippocratic author's speculative account, this discovery and invention are presented as emerging over "a long lapse of time", in response to early deaths and suffering. The gradual shift from "a brutish diet" of raw and powerful food to a diet of diluted, weaker and individualised food was thus driven by necessity and guided by a slow process of trial and error. Medicine is posited as arising with the observation that sick people are often unable to tolerate the same food that healthy people consume, which led to the discovery that soups (or "slops") and liquids can be "beneficial with some patients", but can exacerbate the symptoms of others (HP. VM 5-6).

Two key points are then made in the text: firstly, the invention of medicine is identified as a stage on the way to civilization, since barbarians and even some Greeks "make no use of medicine"; secondly, the author suggests that both the general discoveries of food technology and the invention of medicine arose from the same manner of "reasoning":

> What difference then can be seen between the purpose of him we call physician, who is an
> acknowledged handicraftsman, the discoverer of the mode of life and of the nourishment
> suitable for the sick, and his who discovered and prepared originally nourishment for all men,
> which we now use, instead of the old savage and brutish mode of living? My own view is that

their reasoning (λόγος /*logos*) was identical and the discovery one and the same. (Hp. VM 7) (Jones 1868).[56]

The Hippocratic author characterizes both food preparation and medicine as crafts or arts (*technai*) that were discovered or invented, and then deliberately developed through the same method of reasoning; a method which—given the author's emphasis on the duration of its development and its imperfect accuracy (Hp. VM 12)—warrants cautious comparison with the modern method of trial and error.

As Jouanna notes, unlike Aeschylus's *Prometheus*, which presents medicine as a gift from a deity that was given in its entirety, as a complete, total science, the Hippocratic author attributes the discoveries of cooking and medicine to human ingenuity, with only a customary reference to the gods (1999, 238). Thus, according to the Hippocratic author, discoveries are gradual, cumulative and ongoing: "[…] full discovery will be made, if the inquirer be competent, conduct his researches with knowledge of the discoveries already made, and make them his starting-point" (Hp. VM 2). Furthermore, knowledge of how humans developed the art of medicine is identified as being of the utmost value (presumably to practitioners): "Accordingly there could surely be nothing more useful or more necessary to know than these things, and how the first discoverers, pursuing their inquiries excellently and with suitable application of reason to the nature of man, made their discoveries, and thought the art worthy to be ascribed to a god, as in fact is the usual belief" (Hp. VM 14) (Jones 1868).

Lastly, this Hippocratic author seems to have been acutely aware of the threat posed to the practical *techne* of medicine by the new philosophy in its pursuit of generalizing abstractions. In the following key passage, which according to Laks contains the "first-known occurrence of the abstract term *philosophia*" (Laks 2018, 2), the author distinguishes his approach to medicine from that of some sophists, physicians and Empedocles:

> Certain physicians and philosophers assert that nobody can know medicine who is ignorant what a man is; he who would treat patients properly must, they say, learn this. But the question they raise is one for philosophy [*philosophíā*] ; it is the province of those who, like Empedocles, have written on natural science [or 'about nature' - *phúsis*,], what man is from the beginning, how he came into being at the first, and from what elements he was originally constructed. But my view is, first, that all that philosophers or physicians have said or written on natural science no more pertains to medicine than to painting. I also hold that clear knowledge about natural science can be acquired

from medicine and from no other source, and that one can attain this knowledge when medicine itself has been properly comprehended, but till then it is quite impossible--I mean to possess this information, what man is, by what causes [*aítios*] he is made, and similar points accurately. Since this at least I think a physician must know, and be at great pains to know, about natural science, if he is going to perform aught of his duty, what man is in relation to foods and drinks, and to habits generally, and what will be the effects of each on each individual. (Hp. VM 20) (Jones 1868)

This polemical attack revolves around two concepts that had emerged in the sixth and fifth centuries: "nature" (φύσις - physis) and "cause" (αἴτιος – aítios). It can be inferred that at the time of writing these concepts were circulating, that their meanings were contested and subject to the definitional struggle. The implicit argument appears to contrast the focus on the abstract, general nature of man ("what man is") which prevailed in the emerging discourse of philosophy, with the attention to the particular or individual nature of man ("what man is in relation to the articles of food and drink") practiced by dietetic medicine. Although, as Jim Hankinson notes, the Hippocratic corpus does indeed contain texts which are concerned with defining the general nature of man and diseases, such as *Nature of Man* and *On the Sacred Disease* (Hankinson 2018, 91), the author of *On Ancient Medicine* places great emphasis on how particular natures are affected by diet and regimen ("cheese does not harm all men alike" (HP VM. 20)).

This focus on individual natures is tied up with the emergent concept of causation which can be detected in the passage. The nature of man is described as the result of a process that occurred over time ("this history shows what man is by what causes he was made" (Adams 1868). Thus the particular nature of a human being is determined by the causal interaction between the individual's particular constitution, diet and activities ("in relation to the articles of food and drink, and to his other occupations, and what are the effects of each of them to every one" (Adams 1868). The implicit argument is that in order for a physician to understand a person's particular constitution, they must investigate how this constitution has been determined by diet and lifestyle.

Another level of textual sophistication and self-reflexivity can perhaps be detected here: the historical method employed by the author throughout the text, which deduced the probable determinant factors that must have led to, and followed from, the discoveries of cooking and medicine, should be applied to the study of individuals and their diets, in order to understand the current sensitivity of their constitutions.

To sum up, the author of *On Ancient Medicine* views his approach to medicine as continuing a traditional method of investigating and reasoning, a practical application of *logos*,

the principles and recommendations of which are communicable to non-literate people. The reconstruction of the first inventors thus archaeologically uncovers *logos* being applied in a distant past.

A point that can be hammered home here is the following: scholarly philosophers of the nineteenth and twentieth centuries (e.g. Burnet, Barnes, Kirk) uncritically followed the Athenian school, in particular Aristotle, when attributing the invention of rational science to the Milesian school, yet in the 5th century BC the author of *On Ancient Medicine* had already put forward an alternative account of reasoning and method, which can be read as asserting that systematic rationality had emerged long before the appearance of Ionian science. Indeed, in the Hippocratic author's secular account, the use of this method of reasoning is associated with the dawn of civilization.

4.3.2 Rationality in Medicine: *On the Sacred Disease*

As both Lloyd and Jouanna observe, another classic Hippocratic text, *On the Sacred Disease* (c. 400 BC), provides evidence that the existing fund of knowledge pertaining to diagnosis and healing that was accessible in 5th-century Greece was built upon subtle differentiation of phenomena and sophisticated causal reasoning. This fund, which had been developed through the practice of traditional "magico-religious medicine", could be freely exploited by both charlatans and soothsayers, but also by the new "rationalist medicine" of the Hippocratic physicians (Jouanna 1999, 181-88).

On the Sacred Disease is treated as a breakthrough text in the history of medicine and the history of ideas, since the key argument put forward is that "the disease called Sacred", i.e. epilepsy, is in fact not sacred. In the words of the Hippocratic author: "it appears to me to be nowise more divine nor more sacred than other diseases, but has a natural cause from the originates like other affections. Men regard its nature and cause as divine from ignorance and wonder, because it is not at all like to other diseases" (Hp. Morb. Sacr. 1) (Adams 1868). Thus, in terms of the main polemical purpose of the text, medicine based on diagnoses of divine causality and magical treatment (e.g. through prayers, purification etc.) is rejected in favour of rational causality and natural treatments (e.g. diet, regimen). According to Jouanna, "For the first time, a rational medicine is posited in express opposition to religious and magical medicine" (Jouanna 1999, 184).

The polemic is directed against the "conjurors, purificators, mountebanks, and charlatans" with whom Hippocratic physicians were in competition. However, the point made by both Lloyd and Jouanna is the that the Hippocratic author's scathing attack indirectly reveals that there was "a considerable overlap both in ideas concerning the nature of some diseases and in techniques of treatment" (Lloyd 1979, 39-40). In the following passage, the author of *On the Sacred Disease* attacks charlatans for their deceitful diagnoses, but at the same time acknowledges that their dietary recommendations are effective:

> Such persons, then, using the divinity as a pretext and screen of their own inability to of their own inability to afford any assistance, have given out that the disease is sacred, adding suitable reasons for this opinion, they have instituted a mode of treatment which is safe for themselves, namely, by applying purifications and incantations, and enforcing abstinence from baths and many articles of food which are unwholesome to men in diseases. Of sea substances, the surmullet, the blacktail, the mullet, and the eel; for these are the fishes most to be guarded against. And of fleshes, those of the goat, the stag, the sow, and the dog: for these are the kinds of flesh which are aptest to disorder the bowels. Of fowls, the cock, the turtle, and the bustard, and such others as are reckoned to be particularly strong. And of potherbs, mint, garlic, and onions; for what is acrid does not agree with a weak person. (Hp. Morb. Sacr. 1) (Adams 1868)

Thus while the diagnoses of rational and magical medicine are poles apart, their recommendations were often similar, and similarly effective or ineffective.

Furthermore, as Jouanna notes (1999, 186), in the following passage the Hippocratic author also testifies to the "subtle distinctions" these charlatans made when diagnosing illnesses:

> For, if they imitate a goat, or grind their teeth, or if their right side be convulsed, they say that the mother of the gods is the cause. But if they speak in a sharper and more intense tone, they resemble this state to a horse, and say that Poseidon is the cause. Or if any excrement be passed, which is often the case, owing to the violence of the disease, the appellation of Enodia is adhibited; or, if it be passed in smaller and denser masses, like bird's, it is said to be from Apollo Nomius. But if foam be emitted by the mouth, and the patient kick with his feet, Ares then gets the blame. (Hp. Morb. Sacr. 1) (Adams 1868)

Jouanna concludes:

> One must be grateful to the Hippocratic author for having preserved so detailed an account of the way in which his adversaries, as partisans of a religious medicine, introduced fine shades of difference among the symptoms of crisis in order to distinguish several varieties of the sacred disease and to attribute the cause of each to a different deity. (Jouanna 1999, 186)

While the advocates of divine causality and Hippocratic physicians were contemporary rivals in 5th-century Greece, it is clear that they must have been drawing on the same fund of knowledge, both in terms of symptoms and treatment, and this fund cannot have developed in a short period of time.

Both Lloyd and Jouanna refer to the inscriptions at the Temple of Asclepius at Epidaurus, which, although it was built in the 4th century BC, provide evidence of the remedies recommended by traditional temple medicine, which consisted of both magical elements (the god Asclepius touching patients with a magic ring) and the use of food and drugs as cures, which for Lloyd constitutes further proof of the "overlap" between traditional temple medicine and the new Hippocratic medicine (Lloyd 1979, 40). Jouanna argues that the polemics of the Hippocratic authors were directed at charlatans and soothsayers, rather than at the temple medicine of "the great sanctuaries", which, with their gentler and sometimes safer methods of healing, offered a "final recourse for patients who had been turned away by doctors" (Jouanna 1999, 200). Thus, even at end of the 5th century BC temple medicine and Hippocratic medicine were still drawing on the same fund of knowledge; they often overlapped in terms of symptoms and treatment, and probably fulfilled complementary functions in Greek society.

4.3.3 Flexible Disciplinary Boundaries

While there was considerable overlap in terms of distinguishing between symptoms and with regard to healing practices, at the end of the 5th century BC the demarcation lines between practitioners and disciplines were also not clearly established. Hence, the Hippocratic physicians plied their trade alongside "herb-collectors or 'root-cutters', 'drug-sellers', midwives and gymnastic trainers, as well as priests and attendants who practised 'temple medicine' at the shrines of healing gods and heroes, and the dividing lines between some of these broad categories were far from sharply defined" (Lloyd 1979, 38). Thus the term 'physician' or 'doctor' which came to denote a clearly conceptualized medical practitioner distinct from a priest or apothecary was only beginning to emerge at the end of the 5th century.

Furthermore, at this time the disciplinary classifications of and boundaries between 'medicine', 'philosophy' and 'wisdom' etc. were also varied and fluid. For example, Lloyd's reading of the Hippocratic *On the Sacred Disease* treats the conception of physical causality advocated therein as evidence of a "paradigm switch" having occurred in the culture. The Hippocratic author is read as presupposing "the doctrine of the uniformity of nature, the regularity of natural causes and effects" (Lloyd 1979, 26). This doctrine is not explicitly put forward in the Hippocratic text; it is rather assumed as the basis for the polemical argument. This indicates that the concepts of nature as a uniform totality and of the sufficiency of physical causality had emerged in Greek culture by this time, and were widespread and consolidated enough for the Hippocratic writer to deploy them implicitly against his opponents. Lloyd allows that the doctrine of the uniformity of nature may have emerged with the Milesian school: Anaximander's fragment in (ii) above suggests "it may be that he had some conception of natural phenomena as a totality as subject to determinate physical causes", but he cautions that "Nevertheless we must recognize that this is far from certain" (Lloyd 1979, 33).

Due to the fragmentary and reconstructed nature of the Milesian school's thought, no clear and definitive statement of nature being conceived of as a totality, or of the sufficiency of physical causes can be attributed to Thales, Anaximander or Anaximenes—such a conception can only be surmised on the basis of fragments and doxographic accounts. On the other hand, Hippocratic authors do explicitly formulate the doctrine of physical causality (e.g. "each [disease] has its own nature, and that no one arises without a natural cause" (Hp. Aer.22) (Adams 1868)). *On Ancient Medicine* provides evidence that there was agonistic interaction between different thought collectives that were engaged in conceptualizing nature and medicine, and there are various concepts, themes and preoccupations that can be identified as being shared by the theorists of medicine and the 'philosophers of nature'—balance, harmony, regularity, cause—which indicate they were drawing on the same fund of knowledge, but Lloyd concludes:

> No straightforward account, in which 'science' and 'philosophy' together and in unison stand opposed to 'magic' and the 'irrational', can be sustained in the face of evident complexities both *within* and *between* the theory and practice of medicine on the one hand and those of investigation concerning nature on the other. (Lloyd 1979, 49)

Starting from where Lloyd left off, Laks suggests that the in the 6th and 5th centuries a process of increasing differentiation and specialization took place in the intellectual field of

Ancient Greece, and that, prior to the arrival of Plato's polarizing distinctions and classifications, disciplinary boundaries "remained both disputed and flexible" (Laks 2018, 41). Laks argues that the cultural practice of philosophy as an "essentially theoretical" activity focused on visual, image representations, must have preceded its categorization as such, and he traces the early uses of the term *philosophia*, which designated curiosity (in Thucydides), theoretical representation (as opposed to the practical art of medicine, in *On Ancient Medicine*) and study (as opposed to the action associated with politics, credited to Prodicus, in Plato's *Euthydemus*).

Laks concludes that there were two parameters that allowed the new intellectual activity of philosophy to become differentiated, namely "totalization" and "a certain type of rationalization" combined with "argumentation" (Laks 2018, 44-52). He acknowledges that this "totalization" was not unique or distinct to philosophy, since it characterized the ambition behind Hesiod's *Theogony* and the inquiry into nature. Laks' analysis of the emergence of Greek rationality is inconclusive: he rejects Jean-Pierre Vernant's thesis that Greek rationality emerged as a unique daughter of the Greek *polis*, and thus that Greek reason was essentially and inherently political reason; he attempts to apply Max Weber's notions of rationalization and rationalism to Greek rationality, and seems to suggest that the discipline of philosophy differentiated itself within the broader phenomenon of "Hellenic rationalism"—which was already anti-political, extrareligious and limited to experts—through agonistically presenting a series of heterogeneous, individual Weberian "images of the world" (Laks 2018, 53-67).

Thus, on this reading, in contrast to the Hebrew prophets whose visions and accounts could be compiled and consolidated into a homogeneous, orthodox doctrine which united and provided a defining narrative and worldview for a tribal society, Athenian philosophy differentiated itself as a cultural practice and discourse within the broader discursive fields of Hellenic rationalism, drawing on and partaking in a cultural process of rationalization that had constructed and operated in the fields of politics, law, knowledge transmission, administration, medicine etc. Rather than construct a cumulatively harmonized worldview or set of narratives which could gain widespread social purchase, the thought style and discourse of philosophy emerged as inherently differential and agonistic, both in the sense that the individuals representing or incorporated into its tradition, such as the Milesians, presented competing "images of the world", in critical opposition to other preceding and contemporary images, and in astonishingly short succession; and in the sense that, especially through the contributions of the Athenian schools, philosophy differentiated itself from other forms of cultural production and modes of knowledge, and in the process subjected other cultural practices and modes of

(culture and knowledge) production to differentiation and categorization, thereby defining the objects of, and demarcating the boundaries between, thought styles and discourses—definitions and boundaries that were to become deeply entrenched in European culture. The practice of making critical distinctions between cultural and knowledge practices, and of attempting to supervise the field of cultural production, can be said to be an essential element of European/Western philosophy as a cultural practice. At any rate, it is undoubtedly one of the defining characteristics of Plato's representation of *philosophia*.

4.4 The Socratic caesura

The model of "rupture" or "caesura" (Laks 2018, 1-18) positions Socrates as a radical discontinuity and identifies his philosophy with the emergence of an entirely new style of thinking; one that was qualitatively different—in terms of both content and method—from preceding and contemporaneous thought styles. Hence the Socratic thought style was and is differentially distinguished—in the form of a fundamental turning point—from Ionian natural science, Eleatic abstraction, and the rhetorical practices of the sophists. In discursive terms, the articulation of the Socratic caesura can be located in both the ancient Greek sources and in modern scholarship.

4.4.1 Plato's Socratic caesura

In the ancient sources, the Socratic rupture was most powerfully articulated in Plato's texts. When Plato's Socrates publicly defends himself against the charges of impiety and corrupting the youth of Athens in the *Apology*, he cites his accusers' statement: "Socrates is a criminal and a busybody, investigating the things beneath the earth and in the heavens and making the weaker argument stronger and teaching others these same things" (19b) (Fowler 1914, 75). Hence the charge can be construed as asserting that Socrates was an exponent of what can be identified as *two distinct thought styles*: one focused on naturalist investigations, the other on rhetorical persuasion. Socrates suggests that the source of this public image is Aristophanes' comedy (i.e., *Clouds*), which had depicted a Socrates providing naturalistic accounts of phenomena, such as thunder, and also agreeing to train a young man in rhetorical techniques. However, Plato's Socrates explicitly distinguishes his thinking from naturalist philosophy and sophistry: "I, men of Athens, have nothing to do with these things" (19c) (Fowler 1914, 75). Socrates explains that his investigations are rather focused on wisdom (*sophiā*) and examining those who claim

to be, or who are reputed to be, wise (*sophos*) (20d-e). Later in the text (26b-e), Socrates addresses the specific charges of impiety (asébeia) ("teaching them [the youth] not to believe in the gods the state believes in" (Fowler 1914, 97)) by resisting Meletus' attempt to associate his teaching with ideas attributed to Anaxagoras. When Meletus claims that Socrates "says that the sun is a stone and the moon earth", Socrates responds: "Do you think you are accusing Anaxagoras, my dear Meletus, and do you so despise these gentlemen and think they are so unversed in letters as not to know, that the books of Anaxagoras the Clazomenian are full of such utterances?" (26d) (Fowler 1914, 99). Socrates employs reasoning by analogy to demonstrate that, in contrast to Anaxagoras, he believes in supernatural matters and beings, and thus gods (27b-c). Hence, in the *Apology* the Socratic caesura is articulated in a denial of impiety, as a disassociation from Anaxagorean naturalism, and as an assertion that the Socratic examination of wisdom is entirely different to naturalist investigations.

However, in *Phaedo* 96a-99a, when speaking to an informal circle of friends, Socrates acknowledges that in his youth he had indeed been enthusiastic about "the investigation of nature", before explaining how he came to reject Anaxagoras' naturalist account of causes in favour of accounts of causes that could be construed as political, i.e. pertaining to the practical motivations of the men of Athens. This is exemplified by a comparison: rather than accounting for his sitting and talking in prison with an explanation based on natural causes ("bones and sinews", "air currents and auditory sensations"), Socrates would now focus on "[…] the real causes, which are, that the Athenians decided it was best to condemn me" (Fowler 1914, 331-341).

Hence Plato's texts present two sides of the Socratic caesura: public and private. The public face is a defensive denial delivered to the exoteric thought collective constituted by the "men of Athens", while the private face is an admission and explanation communicated to an esoteric circle constituted by an inner circle of like-minded friends (Fleck 1935a [1979, 105-7). After his trial, sentencing and imprisonment, when facing imminent death, Plato allows his Socrates to reveal that at one time he did in fact have an interest in naturalistic investigations, thereby contradicting his public disavowal. Moreover, rather than being focused on something *entirely different* to the investigations of the naturalists, i.e., practical wisdom instead of natural phenomena, it can be argued that by shifting the focus from natural or physical/physiological causes to political (*polis*-based) causes or explanations Socrates in some sense continued their

investigations of causes/ reasons/ explanations (*aitiai*).[57] Thus, to reiterate, Plato's texts present Socrates on the one hand disassociating himself from Anaxagorean naturalism in a public denial that asserts his investigations of wisdom constitute an absolute dissimilarity and discontinuity, but then on the other hand making a private admission that seems to acknowledge some continuity with Anaxagorean naturalism, in terms of investigative purpose, method, and practice.

Plato's Socrates' public disavowal of naturalism was evidently a dissimulation necessitated by cultural and political factors. The doxographic reports on Anaxagoras' life reconstruct a handful of salient facts: that he brought Milesian/Ionian naturalism to Athens (Clement of Alexandria) (Curd 2007); that he lived in Athens for thirty years and was the teacher of Archelaus and Pericles; and that he was indicted for impiety, sentenced to death, and subsequently released, before leaving—being banished from?—Athens for Lampsacus (Diogenes Laertius 2018, 63-69).

Plutarch's account of Anaxagoras in the *Pericles* registers the tensions and positioning that had become calcified in centuries of discursive layering. On the one hand, Anaxagoras is depicted a source of cultural capital (he "did most to clothe him with a majestic demeanour" (*Per.* 4) (Perrin 1932, 11)) and as a model of composure and public speaking (*Per.* 5). Yet on the other hand, Plutarch's defence of Pericles from the charges of Ion of Chios (a contemporary of Anaxagoras and Pericles) also suggests that Anaxagoras was also held responsible for Pericles' haughty demeanour and arrogance (*Per.* 5). Furthermore, Plutarch's account of Anaxagoras' natural philosophy, which comfortably opposed rational knowledge of natural causes with superstition and ignorance (*Per.* 6), represents a thought style which dismissed traditional practices in a way that must have been shocking in 5th-century Athens:

> A story is told that once on a time the head of a one-horned ram was brought to Pericles from his country-place, and that Lampon the seer, when he saw how the horn grew strong and solid from the middle of the forehead, declared that, whereas there were two powerful parties in the city, that of Thucydides and that of Pericles, the mastery would finally devolve upon one man,—the man to whom this sign had been given. Anaxagoras, however, had the skull cut in two, and showed that the brain had not filled out its position, but had

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[57] In *How Philosophy Became Socratic*, Laurence Lampert distinguishes between Plato's "politic" and "impolitic" philosophy. The former is concerned with the "public appearance of philosophy" and is conveyed in dialogues such as *Protagoras*, *Charmides* and the *Republic*, while the deeper, impolitic philosophy is articulated to the initiated in the more private dialogues—*Phaedo*, *Parmenides* and *Symposium* (Lampert 2010, 8). This distinction converges with Fleck's model of communication between exoteric and esoteric circles (Fleck 1979, 111-125).

drawn together to a point, like an egg, at that particular spot in the entire cavity where the root of the horn began. (*Per.* 6) (Perrin 1932, 15-17)

Writing over five centuries later, in the era of imperial Rome, when Athenian philosophy had been long since appropriated and Romanized, Plutarch still felt the need to stress that the accounts "the naturalist and the seer" were not incompatible, by distinguishing between the cause and meaning of the one-horned ram (*Per.* 6). Regardless of whether there is any truth to the story of Anaxagoras and Lampon, the key point is that over the course of centuries Anaxagoras had become a consolidated symbol of a naturalist philosophy that, firstly, posed a threat to traditional knowledge practices and, secondly, was embraced by the main representative of the radical democracy.

In the setting of Plato's *Apology*, thirty years after Pericles' death, the "men of Athens" of 399 BC are represented as still viewing the mechanical explanations offered by naturalists as a threat to the authority of the state or civic religion based on traditional stories and rituals (Irwin 1992, 51-52) (Miller Platter 2010, 30). One explanation for this apparently renewed emphasis on traditional explanations and practices is the context of collective trauma:

> With the democratic restoration, Athens was freed from the Thirty, but remained in dire straits: Perhaps half the citizen population of Athens had been killed in the later years of the war and the civil war; the economy was a shambles; the fleet and walls that had protected the city were destroyed. Surviving Athenians had lost much: In many cases their ancestral property was lost forever. Once-wealthy families struggled to make ends meet. The Athenians held civic festivals stressing national unity. […] Meanwhile, the Amnesty meant that the people's anger and pain at the losses suffered during the reign of the Thirty could not be satisfied by seeking justice through the legal system. It was an agonizing era; everyone's life was in disarray. (Ober 2017, 69-70).

At the time of Socrates' trial in 399 BC, the restored democracy seems to have been distancing itself from the policies and mindset of the Periclean-radical democracy, which was perceived as having embroiled Athens in decades of war. Efforts were made to bolster the restored democracy's claims to traditional legitimacy: for example, after 410, transcribers were tasked with recovering and writing up the laws of Solon, and this project was resumed after 403 (Wolpert 2002, 37).

There is some debate in the scholarly literature as to whether the trial of Socrates was primarily political or religious in nature. For example, Ober argues that Meletus grounded the

accusation in the charge of impiety in order to circumvent the Amnesty in place on prosecuting those associated with the coup of the Thirty (Ober 2017, 71). On this account, Socrates was prosecuted because he refused to change his behaviour after the oligarchic coup of 404-3: he continued to criticise the democratic culture in public, at a time when the mood had evidently changed: "The Athenian willingness to tolerate potentially dangerous behavior and apparently irresponsible public attitudes reached a low point" (Ober 2017, 72).

However, Edwin Carawan makes a crucial point: "At Athens there was no wall of separation. Every aspect of political activity was sanctified by ritual, and much of religious life was regulated by laws and decrees" (2013, 210). Thus the distinction between political and religious reasons for the prosecution can be viewed as an anachronistic projection by a modern thought style that obscures aspects of the mentality in question in due to contemporary biases. Carawan suggests that Socrates' frequent references to his *daimonion*, his private divine voice mentioned by both Plato and Xenophon in their accounts of the trial—were seen as "undermining the sacred practice of the polis" (2013, 207). The criminal charge of corrupting the youth of Athens probably contained a key religious component: "Thus Meletos and Anytos seem to have argued that Socrates alienated young men from the proper authorities who should have guided them in cult ritual and family obligations" (2013, 211).

The historical analyses ultimately resort to speculation due to the fact that the accounts of Plato and Xenophon, the only available sources for this trial, are driven by agendas and attempts to contest the image of Socrates and transmit alternatives. From the perspective of Fleck's theory, we have representations of a conflict between thought styles, but viewed through the lenses of thoughts styles aligned with (their interpretations of) Socrates' thought style. In the light of the previous sections of this thesis that tried to highlight the oligarchic, anti-democratic determinants of Socrates' thought and practices, and given the historical evidence for a less tolerant restoration of the demokratia after 403, it has to be borne in mind that both Plato and Xenophon inevitably suppressed and de-emphasised elements of Socrates' discursive activity, while stressing others.

The two-sided articulation of the Socratic caesura in Plato's texts—a public-exoteric disavowal and assertion of discontinuity in *The Apology*; a private-esoteric admission of shared practice in *Phaedo*—can be interpreted as representations which register the power struggles and interactions taking place between specific thought collectives in 399 BC. In turn, Plato's apologetic representations, written in the aftermath of Socrates' execution, were determined by these struggles and continued them. Hence Plato's Socratic caesura can be treated as a component of a strategy that retrospectively represented a complex conflict between networks

and discourses by reconstructing at least three competing thought collectives: 1) the "men of Athens", the jurors who can be identified with the restored democracy, endowed with legal authority and power upheld by the traditions of civic religion and education; 2) the diverse traveling wise men (homogenized as 'sophists' (Wallace 2007, 218) or 'natural philosophers') who brought new ideas and practices from other Greek cities (including former subject-allies and colonies), and who famously exerted influence over public figures (statesmen-orators) and the rich young men of Athens; and 3) Socrates and his circle of followers, who, it can be inferred, were inveterate critics of the restored democratic regime.

It is suggested that the itinerant wise men who roamed across the Greek-speaking world in the 5th century BC evolved from the touring poets of previous centuries. The transition from poets to wise men (*sophoi*)—reflected in the shift from poetry to prose, and from recitals to lectures—responded to the practical needs emerging in the increasingly interconnected and complex Greek city-states (Jaeger 1965, 291-98), where the use of speech became essential for exerting power in the public domain of the *polis*—in the Assembly and tribunals (Vernant 1982, 50-52; 1988, 99). In the 4th century, the hitherto overlapping roles of these knowledge specialists were subjected to a process of definition and professionalization: "philosophers, rhetors, playwrights, politicians, generals, and sometimes even sophists became distinct cultural categories" (Wallace 2007, 217).

Plato's texts consistently represent these wandering wise men as a malign foreign influence by reducing their heterogeneity to certain shared characteristics. This facilitated the discursive construction of thought collectives and styles, in particular: 1) the sophists, who charged money for instruction focused on rhetoric and political *areté*, and who tended to question and relativize traditional beliefs and practices; and 2) naturalists, meaning Anaxagoras and his predecessors, who were apparently satisfied with materialist or mechanistic explanations of phenomena—accounts which are both incompatible with traditional religious explanations and insufficient from the perspective of Platonic philosophy, since they either render intellect (νοῦς) unnecessary or incoherent (i.e. Anaxagoras's account, as presented in *Phaedo*) (Gerson 2020, 48-65).

The influence of these alien thought styles on Pericles is also clearly signalled in Plato's texts. Thus while "Anaxagoras the Clazomenian" is identified with naturalism in *The Apology* and *Phaedo*, in *Phaedrus* he is also said to have influenced Pericles' "art of speaking" (270a). In *Protagoras*, the oldest representative of the sophists is explicitly portrayed as exerting a foreign and pernicious influence: "A foreigner who comes to great cities and persuades the best of the young men to abandon the society of others, kinsmen or acquaintances, old or young,

and associate with himself for their own improvement – someone who does that has to be careful …" (316c) (Taylor 1976, 9). In his contextual analysis of the emergence of Socratic philosophy, Laurence Lampert highlights that the fact Protagoras had been Pericles' teacher haunts the argument between Protagoras and Socrates. Notably, two of Pericles' sons are present at the confrontation, sons whom—Socrates suggests (319e-320a)—Pericles evidently failed to educate in political *areté*. Set in 433, hence just prior to the First Peloponnesian War, Plato's *Protagoras* can be read as implicitly raising the question of whether this sophist might have been partially responsible for the outbreak of war with Sparta. According to Lampert, Pericles encouraged and imported "the Protagorean enlightenment", and this ultimately endangered "the whole Achaian enterprise" (2010, 62, 121). In this reading, which follows the hints in Thucydides (1.23) and Plutarch (Pericles 31) that the disastrous imperial war was caused by Athenian expanding strength and Pericles' arrogance, the enlightenment fostered by Protagoras and enshrined by Pericles' building projects was based on a confused and limited conception of virtue: one in which hedonism is restrained by the threat of punishment, rather than through the power of knowledge (Lampert 2010, 116).

These interpretations justify treating Plato's depiction of the Socratic philosophy as an intervention which sought to resist the influence of foreign thought styles on the ruling class of Athens and its future representatives. The favourable reception of Ionian-Anaxagorean naturalism and Protagorean sophistry indicates the eroding authority of traditional stories and values, and thus an epistemic crisis. The Socratic thought style, as represented in Plato's texts, mounted a response to this crisis, first by revealing the shortcomings and pernicious aspects of naturalism and sophistry, then subjecting traditional *mythos* and *paideia* to sustained critique in the *Republic*. Thus the Platonic-Socratic caesura was articulated from within a complex nexus of representation strategies that constructed, homogenized and prosecuted rival thought styles. On a fundamental level, the depicted conflict it concerned cultural-educational practices and norms of the restored *demokratia*.

4.4.2 Anti-Socratic Representations of Socrates: the charge and Aristophanes' *Clouds*

The suppressive and exclusionary strategies of the Platonic thought style succeeded: no sophist representations of Socrates' thought style have survived. As one of the "philosophies of the losers" (Laks 2018, 34), the sophist thought style was unilaterally represented by the denigrating, homogenizing and suppressive strategies of Socrates' allies and heirs (Plato, Xenophon, Aristotle) (Jaeger 1965, 291-298) (Wallace 2007, 218). Likewise, there are no

substantial representations of the Socratic philosophy in extant naturalist accounts, such as those that can be reconstructed from fragments of Democritus, whose writings were subjected to more obliquely suppressive strategies in Plato's texts[58] (Ferwerda 1972). Thus the one-sided representations of the sophists and naturalists, and in likelihood their fragmentary nature too, can be viewed as the result of discursive suppression and devaluation inseparable from the articulation of the Socratic caesura.

The main depictions of Socrates that were not aligned with his thought style are found in the charges of Socrates' accusers and Aristophanes' *Clouds*. Both these representations can be identified with the position of the traditional thought style, even if such an identification is far from straightforward in the case of Aristophanes' satire.

The statement of Socrates' accusers cited by Plato (*Apol.* 19b)—"investigating the things beneath the earth and in the heavens and making the weaker argument stronger"—indicates, somewhat conveniently, that the ruling thought collective viewed the diverse new thought styles as a homogenous threat. It can be surmised that the ostensibly non-theological *logoi* of naturalism were viewed as posing a challenge to the authority of traditional *muthoi*, and that the rhetorical techniques demonstrated by the foreign sophists and the native Socrates in the public spaces of Athens were recognized as a threat to the traditional practices maintained by the older generation. Hence naturalist prose accounts and the new spoken language games played the sophists and Socrates' circle could be strategically lumped together and subjected to public disapproval.

The new thought styles and the intergenerational nature of the conflict were pitilessly satirized in Aristophanes's *Clouds*, first performed in 423 BC, and thus over twenty years before Socrates' trial. Aristophanes' famous caricature of Socrates as an amalgamated intellectual type, who is both an absurd natural philosopher and a depraved teacher of sophist rhetoric, has been the source of conflicting interpretations.

Most notably, in his classic edition of *Clouds* from 1968, Sir Kenneth Dover asserted that Aristophanes did not see any difference between Socrates and the sophists, or would not have considered the difference as significant, since "He drew one basic distinction, between the normal man and the abnormal man" (1968, liii). In Dover's view, Aristophanes simply

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[58] Diogenes Laertius famously cited a source that claimed Plato wanted to suppress Democritus' writing by burning surviving copies: "Aristoxenus, in his *Historical Commentaries*, says that Plato wanted to burn all the copies he could collect of Democritus' works, and that the Pythagoreans Amyclas and Clinias prevented him, arguing that it would do no good, since by then his books had been widely circulated" (Diogenes Laertius 2018, 454). Ferwerda considers this story to be grounded in fact, even thought its source, Aristoxenus, was an Aristotelian who was "prejudiced against Plato" (Ferwerda 1972).

considered Socrates and his ilk to be abnormal parasites, and philosophy to be antithetical to civilized society, hence his play can be viewed as attempt to arouse negative feelings against philosophers and ultimately to influence public opinion and invite "violence, or repressive legislation, against such teachers" (1968, lvi).

In contrast, in his 2015 edition of *Clouds*, Stephen Halliwell situates Aristophanes's comedy within the community tradition of the *kômos* and the Dionysia festivals in which civic seriousness and the "norms of shame and inhibition" were abandoned for a few days. At such times, the authors of comedies enjoyed great satirical freedom: public figures could be subjected to ridicule and abuse without fear of political or legal reprisals. Thus when considering the mockery of Socrates in *Clouds*, it should be borne in mind that this occurred in a very specific social context—one in which the legal and social norms that normally regulated the public sphere were briefly set aside, in order to provide the community with temporary release from social pressure Halliwell 2015, xix-xx).

In Halliwell's reading, rather than being ignorant or indifferent to the differences between the naturalists, sophists and Socrates, Aristophanes was actually poking fun at the general public's ignorance. In other words, the homogenizing treatment of the diverse new intellectual currents, placing them all under one roof and under the tutelage of a grossly caricatured Socrates, was in itself a joke—perhaps at the audience's expense. Aristophanes taunts his "*clever* audience", hoping they would be able to appreciate the ludicrousness of housing all these heterogeneous thought styles under the roof of the Thinking Institute (*phrontistêrion*) (Halliwell 2015, 12-13).[59]

In the play, the intergenerational conflict brewing in Athens is primarily represented in the *agon* between the hapless bumpkin Strepsiades and his profligate son Pheidippides; but it is also mirrored and reflected in the *agones* between Strepsiades and Socrates and his acolytes at the Thinking Institute, and between the personified arguments Moral/Right and Immoral/Wrong.

All of the conflicts dramatized in *Clouds* ultimately boil down to the issue of *paideia*: the ways that young men's behaviour can be guided and trained. Thus, on the side of tradition stand Strepsiades, with his unquestioned belief in Zeus and the divinities, and the Moral/Right argument, who defends the way boys were taught in "the old days", i.e. traditional forms of

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[59] Robin Waterfield provided partial support of this interpretation, arguing that Aristophanes' Socrates is used as "a figurehead for intellectuals of all types", "a catch-all character". Aristophanes' comedy exploits the popular fear of intellectuals and chose Socrates as the butt of his joke because he was a native Athenian who would have been immediately recognizable to the audience (Waterfield 1990, 10).

paideia, involving discipline at the gymnasium, singing traditional songs, and unquestioning respect for (lecherous) elders. On the side of "*new* ideas" stand Socrates, who explicitly denies the existence of Zeus and offers naturalistic explanations for phenomena as diverse as the humming sound that gnats make (159-165) and thunder (375-8), and the Immoral/Wrong argument, who draws on the populist crowd, denies the existence of Justice, disrespects elders, celebrates loitering in the agora, advocates abandoning self-control, and offers a range of rhetorical strategies for evading lawsuits and legal consequences (889-1110). The inter-generational conflict comes to a head when Pheidippides turns the arguments and the moral education he received from Socrates against his own father, since he can now prove that it is "right to beat your own father" (1330-1340). The new thought styles emanating from the Thinking Institute are thus comically depicted as training young men to undermine both traditional social relations (paternal-filial) and the legal and commercial order (breaking promises, denying creditors, evading lawsuits).

The homogenizing treatment of heterogeneous thought styles is satirized in Strepsiades' naive view of those who live in the Thinking Institute, which conflates naturalist cosmology with sophistry:

> Inside this building are men who say the sky
>
> Is not what it seems—no, it's really a baking-lid
>
> Which curves all round us here, so we're the charcoal.
>
> These people will teach anyone who pays them a fee
>
> How to argue and win, regardless of right and wrong (96-99).
>
> (Halliwell, Aristophanes. Clouds,Women at the Thesmophoria, Frogs, A Verse Translation, with Introductions and Notes 2015, 24)

As Halliwell points out, it would have been quite common knowledge that most natural philosophers did not teach rhetoric, and that the sophists did not engage in cosmological speculation: the fact that Strepsiades is unable to distinguish between these intellectual pursuits and uses a clichéd image of philosophers is part of the joke, emphasizing his rustic backwardness (Halliwell 2015, 11).

However, at the same time, Aristophanes' depiction of the Thinking Institute and Socrates draws on and perpetuates—for comedic purposes—the cliché of the new fields and methods of enquiry being housed under one roof. As soon as Strepsiades enters the Thinking Institute and begins examining various pieces of equipment and artefacts, a student identifies

the objects with different sciences "Well this is astronomy here… That's geometry … And this is a map of the whole wide world, you see?" (200-205). Then Aristophanes' Socrates espouses ideas and methods which are far broader than the sphere of practical wisdom suggested by the Platonic-Socratic caesura: aside from denying the existence of the traditional gods, praying to the new divinities of Air, Aither and Clouds, and offering naturalist explanations for biological and meteorological phenomena, he also attempts to instruct Strepsiades in the use of words, grammar and rhythm, and introduces him to the Thinking Institute's linguistic innovations (470-670). In a passage that it worth quoting at length, Halliwell identifies all the types of enquiry practiced at the Thinking Institute:

> As the play develops, we are given a picture of the Thinking Institute as housing at least five types of intellectual/philosophical enquiry: first, cosmology, astronomy, 'meteorology', and physics of the kind particularly ascribed to the Ionian tradition of early Greek philosophy; second, a further group of scientific subjects, including geometry, zoology, and geography; third (though overlapping with the first category), a kind of philosophical theology which critiques traditional religion and sets up a new, more abstract conception of the divine (even if it also shows signs of being able to dispense with the divine altogether); fourth, language-related matters ('proto-linguistics', one might say), including systems of grammatical and metrical classification; fifth, rhetorical debating skills, as enacted in the play's showpiece contest between the two personified arguments, Moral and Immoral. We can see that Aristophanes has taken (and distorted) material related to a large range of thinkers, among them the early Milesians (Thales, Anaximander, Anaximenes), Empedokles, Anaxagoras, Diogenes of Apollonia, Hippon of Samos, Protagoras, the music-theorist Damon, the Pythagoreans(?), as well as the historical Sokrates himself (especially in hints of his one-to-one dialectical methods and his concern for intense self-scrutiny or 'the examined life'). (Halliwell 2015, 11)

The comedy of *Clouds* depends on the audience being able to appreciate the humour in, firstly, Strepsiades' ignorance of the heterogenous thought styles present in Athens, and secondly, Aristophanes' deliberately mixing up these diverse thought styles and ridiculing their pretensions. Aristophanes' parabasis explicitly taunts the audience, insisting that the play requires "clever" and "*sophisticated* spectators" (521) and suggesting that the failure of the play's first performance was due to the first audience's lack of sophistication. Since *Clouds* mocks both rustic ignorance and intellectual ridiculousness, any spectators who failed to see that Aristophanes' Socrates as a pastiche and caricature of philosopher types, and the Thinking Institute as housing an implausible mix of schools, would be viewing the play at the intellectual

level of the play's hapless Strepsiades, and thus would themselves have been the butt of Aristophanes' jokes.

Aristophanes' satire of inter-generational conflict and emergent thought styles sheds light on the fact that these phenomena were associated with various social practices, many of which had the potential to undermine the traditional social order. The primary reason for Strepsiades' resorting to the Thinking Institute is that his son Pheidippides has let "his hair grow long" and incurred debts due to his obsession with horses and chariot-racing. Rather than continuing the family tradition of agricultural production, Pheidippides—encouraged by his "city girl" mother—is an unproductive drain on his father's resources. Thus the shift from rustic life to city life is a form of corruption: young men are becoming idle and are living beyond the family's means. Then the horse-obsessed Pheidippides describes the students at the Thinking Institute as a "pale-faced, shoeless crowd", suggesting that the ascetic, intellectual lifestyle pursued by Socrates and his acolytes entails certain bizarre behavior—e.g., staring at the ground—that is at odds with traditional sporting and military prowess. Finally, Socrates himself enumerates a range of collectives and social practices that are sustained by the heavenly Clouds:

> You don't know then that they keep alive great hordes of *clever* people:
> Purveyors of prophecy, medical experts, long-haired signet-ring-wearers,
> Composers of intricate dithyramb lyrics, and cheats with their heads in the clouds.
> Layabouts like these they keep alive for treating the Clouds as their Muses. (330-334)
> (Halliwell 2015, 34)

Aristophanes' Socrates thereby offers a glimpse of the heterogeneous epistemic communities at large in the broader society outside the Thinking Institute: numerous new types of intellectuals engaged in social practices that—from the traditional perspective—are perceived as bizarre, dishonest, unproductive and parasitic. By having this caricatured Socrates express approval of all these "*clever* people", and shortly thereafter having the Chorus of Clouds describe him as a "priest of subtle drivel", Aristophanes' satire represents Socrates as a leading figure in the widespread counter-cultural movement corrupting Athens.

Although *Clouds* resists any facile ascription of a 'conservative' position to Aristophanes, since all forms of *logos* are equally subjected to ridicule (Freydberg 2008, 54) and are ultimately consumed by Strepsiades' arson, the text clearly signals that the heterogenous thought styles emerging in Athens at that time were, firstly, perceived as posing a homogenous threat to the existing social order, and were, secondly, all guilty of ludicrousness. Hence *Clouds*

pre-empts and rejects the articulation of the Socratic caesura: regardless of their nit-picking distinctions and internecine conflicts, the naturalists, sophists, and Socrates' circle are all represented as engaged in the same ridiculous and socially corrosive practices.

It is worth reiterating that *Clouds* was produced in 425 BC, thus six years into the Peloponnesian War, and just two years after the outbreak of civil strife ("the great stasis") described Thucydides (3.82-85). It is also contemporaneous with the discursive antagonism described and articulated in the Old Oligarch's *Athenaíōn Politeía*. The intergenerational and cultural conflict and collapse of social norms depicted by Aristophanes can thus be situated within a broader context of division and upheaval.

4.4.3 The Consolidated caesura – Xenophon and Aristotle

The Platonic-Socratic caesura was discursively reinforced by Xenophon's portraits of Socrates, supported by Aristotle's comments on Socrates, and finally consolidated by Cicero's emphasis of Socrates' shift of focus.

Like Plato, Xenophon primarily dissociates Socrates from naturalist philosophy, by portraying him in the public eye, focused on "human affairs" in the agora, and clearly dismissing the then popular discussions about the "Nature of Universe" and "the laws that govern the phenomena of the heavens" as "sheer folly" (*Mem.* 1.1.10-11) (Marchant 1923, 9) The secondary dissociation performed in Xenophon's texts is more subtle: Xenophon's Socrates is contrasted with the sophists explicitly when it is emphasized that he does not accept payment (*Defence*, 12-20), while Protagoras, Gorgias and Prodicus are described as receiving "a great deal of money" for "expert instruction" (*Symp*, 1.5) (Todd 1923); but also implicitly when Socrates' moral earnestness and clear opinions on how to live a good life are stressed throughout Xenophon's texts (i.e. in contrast to sophistic relativism).

Though Aristotle's reconstruction of the history of philosophy in the *Metaphysics* avoids the Platonic-Socratic caesura, and instead embeds Socrates within a continuist narrative that culminates in Aristotle's philosophy, his comments on Socrates' project could be used as support for the Socratic caesura: "And when Socrates, disregarding the physical universe and confining his study to moral questions, sought in this sphere for the universal and was the first to concentrate upon definition, Plato followed him […]" (*Metaphysics* 1.987b) (Tredennick 1933). This depiction of Socrates as pursuing universal moral principles, i.e. rather than political *areté*, also allows Aristotle to suppress the sophists from his account of philosophy; as

Jaeger notes, "The history of philosophy given by Aristotle in the *Metaphysics* excludes the sophists" (1965, 294). Thus, even though Plato's texts clearly depict a sophist such as Prodicus as focused on both ethical issues and the accurate use of words (*Laches* 197d, *Meno* 75e, 96d), Aristotle's text positions Socrates' shift from the physical universe to moral universals and logical definitions as a unique discontinuity—even if this discontinuity is then subsumed within an incremental continuist narrative.

4.4.4 The Ciceronian-Socratic caesura

Laks argues that it was Cicero that decisively consolidated the Socratic caesura largely due to the "large diffusion" and "apparent simplicity" of his *Tusculanae Disputationes* (45 BC) 2018, 9-12). In the key passage from this work, which both affirms the break from natural philosophy and erases the contributions of the sophists, Cicero asserts:

> But numbers and motions, and the beginning and end of all things, were the subjects of the ancient philosophy down to Socrates, who was a pupil of Archelaus, who had been the disciple of Anaxagoras. These made diligent enquiry into the magnitude of the stars, their distances, courses, and all that relates to the heavens. But Socrates was the first who brought down philosophy from the heavens, placed it in cities, introduced it into families, and obliged it to examine into life and morals, and good and evil (Yonge 1877, 166-67).

While the break from naturalism is explicitly signalled, the designation of Socrates as the first urban moral philosopher implicitly and effectively eliminates the sophists from the history of Greek philosophy reconstructed in Cicero's dialogues.

The sophists are also explicitly suppressed in Book II of Cicero's *De Finibus Bonorum et Malorum* (45 BC), where Cicero describes Socrates as "the father of philosophy" and at the same time contrasts his technique of questioning interlocutors with the lecturing technique of the sophists, in particular Gorgias (Woolf 2004, 26). Thus Socrates is identified as the father of a new field of enquiry, philosophy, while it is implied that whatever the sophists were engaged in was clearly *not* philosophy.

In simple terms, Cicero's project of appropriating and repurposing Greek philosophy for the needs of the Late Republic reiterated the Platonic-Socratic caesura as a shift away from impractical natural philosophy towards practical moral philosophy. However, the Ciceronian-Socratic caesura simultaneously maintains the suppression of the sophists and utilizes

Aristotle's *Topics* and *Rhetoric* to counter Plato's Socrates' denigration of oratory (Long 1995, 52-58). Thus Cicero synthesized components of various thought styles to present philosophy as an activity that could combine leisurely theorising in rural villas with practical engagement in the Senate, and that would thereby lead to the moral improvement of the Republic. In broad outline, this fusion of intellectual cultivation with civic duty is what made the Ciceronian tradition so appealing to the Italian humanists in 15th-16th century Italy (Marsh 2013) and the empiricists in 17th-18th century Britain (Stuart-Buttle 2018) as they sought alternatives to scholasticism and dogmatism, respectively.

On closer analysis, however, matters are not quite so straightforward, since the identification of Socrates as a rupture or starting point is problematized in Cicero's multi-layered *Academica*. Circulated in 45 BC, thus originating from the same period of activity that produced *Tusculanae Disputationes* and *De Finibus*, the *Academica* essentially dramatizes an "inheritance dispute" between Roman adherents of the sceptical and dogmatic (Stoic) schools who claim Socratic ancestry (Glucker 1997, 59-74). The *Academica* is perhaps the most complex of Cicero's texts from a Fleckian perspective, since, in addition to being fragmentary, the surviving sections navigate disputes between thought collectives that were separated by several spatial and temporal distances: the divergence of the Platonic Academy and Aristotle's Peripatetic school, the conflict between the Greek Stoic and Academic schools from the 2nd and 3rd centuries BC; the intra-Academic disputes of the 1st century BC; and Cicero's direct knowledge of recent or contemporary conflicts between the Greek and Roman Stoics, Epicureans and Academic Sceptics (62-45 BC) (Brittain 2006).

Cicero's interlocutors represent an idealized Roman thought collective—including the generals Catulus and Lucullus, who demonstrate detailed knowledge of Greek philosophical traditions—that is able to navigate the exegetical layers constructed by thought collectives from previous generations, locations and centuries. Since Cicero's text is the main evidentiary source for some of philosophers and ideas discussed therein, such as the sceptical Academic philosophy of Philo of Larissa, recent or contemporary scholarship is ongoing and still sketchy (Powell 1995, 19, 32). J. Glucker makes the—very Fleckian—point that the reconstruction of the ideas and modes of thought conveyed in ancient texts is in constant danger of being influenced by "contemporary attitudes and modes of thought" (1997, 64). Thus, the gaps and multi-layered textuality present in Cicero's *Academica* entail that it is a uniquely problematic text, especially when combined with Cicero's strategically elusive scepticism.

One of the key issues that the scholarly literature focuses on is whether Socrates articulated a genuinely sceptical position, and if so whether this was dogmatic-negative

scepticism or mitigated scepticism. With regard to the first issue, Lucullus, who represents one version of Antiochus' Stoic position, argues that Socrates' scepticism is not genuine: "As for Socrates, he used to ascribe the larger part in arguments to the people he was trying to refute by deprecating his own contribution. So, since he said one thing and thought another, it was his practice to use the kind of dissimulation the Greeks call *eirôneia* ['irony']" (*Ac*. 2.15) (Brittain 2006, 10). In contrast, Varro, presented as another follower of Antiochus, first reiterates the Platonic-Socratic caesura—as articulated in *Apology* 23b:

> As I see it, Socrates was the first (this is a point accepted by all) to summon philosophy away from the obscure subjects nature itself has veiled—the questions all his philosophical predecessors had been concerned with—and to direct it towards ordinary life. He set it onto investigating virtue and vice and good and bad in general, considering celestial subjects to be far beyond our knowledge or, even if they were perfectly knowable, still completely irrelevant to the good life. (*Ac*. 1.15) (Brittain 2006, 92)

However, he then follows this with a description of, and commentary on, Socrates' scepticism, suggesting it was consistent and genuine, but also at the same time perhaps dogmatic and hypocritical:

> His manner of argument is the same in practically all the conversations his students wrote up so eloquently and variously: he makes no affirmation of his own, but refutes other people and says that he knows nothing except just that. This, he says, is his advantage over everyone else: while they think they know what they don't know, he knows just the fact that he doesn't know anything—and that, he thinks, is why he was declared the wisest of all men by Apollo, because not thinking you know what you don't know is the sum of human wisdom. And yet, though he kept making these claims and stuck with this view, every speech of his was taken up with praising virtue and exhorting people to pursue it, as one can see from the books of the Socratics, and especially Plato's (*Ac*. 1.16) (Brittain 2006, 93)

Here Varro's Socrates can be construed as asserting a dogmatic scepticism based on the assumption that he knows what does not constitute knowledge, yet at the same time engaging in practices which seem to be based on knowing what virtue is and how it can be pursued. At any rate, Varro contrasts Socrates' scepticism with the systematic art of philosophy institutionalized by the Academics and Peripatetics, which was "something Socrates was far from approving" (*Ac*. 17) (Brittain 2006, 93)

While the two Antiochian interlocutors present conflicting views of Socrates' scepticism—ironic and dogmatic, both Lucullus and Varro trace their Stoic ancestry back to Plato's dogmatic certainty. The alternative to this dogmatism that can be reconstructed from the 'Cicero' of the dialogue's fragmentary contributions is mitigated scepticism or Academic probabilism, which is defined in opposition to both the rational certainties of the Stoics and the materialist certainties of the Epicureans (Powell 1995, 23). Thus the 'Cicero' of the *Academica* dialogue includes Socrates among a non-dogmatic group of thinkers who preceded him: "Democritus, Anaxagoras, Empedocles, and virtually all the early philosophers" and who all agreed that "that nothing could be cognized, apprehended, or known" (*Ac.* 1.44) (Brittain 2006, 106). While 'Cicero' identifies the Academic sceptic Arcesilaus as rejecting Socratic dogmatic scepticism, and withholding assent on the basis of universal inapprehensibility, 'Cicero' also suggests that it is possible to retrieve a non-dogmatic Plato from his books, where "nothing is affirmed, there are many arguments on either side, everything is under investigation, and nothing is claimed to be certain" (*Ac.* 1.46) (Brittain 2006, 107).

On the basis of this complex, multi-layered exegesis, which the scholarship acknowledged was inconclusive and ongoing (Brittain 2006, xxxvii), it is suggested that Cicero primarily employed Academic scepticism for epistemological purposes and that this strategy opened up the range of his philosophical considerations (Long 1995, 41-42). In terms of Cicero's positioning with regard to Socrates, the *Academica* aligns with the Platonic-Socratic caesura articulated in *Apology*, thus reiterating the shift from natural to moral philosophy and the suppression of sophist oratory, but also repurposes Plato's Socrates' confession of ignorance (*Apol.* 20c-22e) to include him among a group of 'early philosophers' who had arrived at sceptical positions due to epistemological despair. The critical tradition of Academic scepticism allowed Cicero to distinguish a mitigated, probabilistic sceptical position from the scepticism of the early philosophers, which could be retrospectively identified as dogmatic. The sceptical withholding of consent offered strategic benefits, since it enabled Cicero to treat the ideas contained in Plato's texts— such as the immortality of the soul, as explored in *Tusculanae Disputationes*—as plausible or probable theses (*probabilia*), rather than as positive doctrines (1995, 41-42). More broadly, Academic probabilism enabled Cicero to resist the dogmatic certainties articulated by post-Socratic philosophical schools—whether Platonic, Aristotelian, Stoic or Epicurean.

The Academic sceptical practice of withholding consent also enabled Cicero to synthesize another key element into his philosophical position: the use of Aristotle's *Topics* and *Rhetoric*, or at least Peripatetic handbooks, to counter Plato's Socrates' denigration of oratory

as a branch of *kolakeia* (pandering or flattery[60]) and his denial of its status as a *technē* (*Gorg*. 463-466a). Thus, in addition to the critique of Socrates' dogmatism, Cicero also criticizes Socrates for separating the practices of philosophy and rhetoric (Long 1995, 50-55); in other words, for splitting apart "the knowledge of forming wise opinions and of speaking with distinction" (*De. Or*. 3.59 ff.) (Wisse and May 2001, 241). Resisting the closure of dogmatic certainty, Cicero revives Plato's dialogue format to allow the genuine rhetorical presentation of "many arguments on either side". In contrast to the sophists' mercenary relativism, as depicted by Plato, and the perversity of their making "the weaker seem the better cause", as charged by Aristotle (*Rh*. II.24. 1402a), Cicero's presentation and examination of the arguments for and against is aimed at finding the advantages of various positions (including ethical theories) (Annas 2001, xii). The Ciceronian-Socratic caesura thus involves complex conceptual-discursive positioning that critiques the Platonic-Socratic caesura, synthesizes Peripatetic rhetoric and Academic scepticism, and justifies a uniquely Roman conception of philosophy as a theoretical-rhetorical civic practice.

Cicero's texts dramatize, embody and illustrate the interactive processes by which one thought collective reinterprets and repurposes the thought styles of other thought collectives and actively adapts them to the needs determined by a new context. On the one hand, the creation of a unique Roman philosophy involved the importation of concepts, methods and practices associated with Greek thought styles, which were transmitted interactively, through layers of exegesis and translation. On the other hand, the construction of a Roman thought style that could challenge the Greek cultural-discursive hegemony required critical self-reflection and contrastive self-identification. At the same time, the Ciceronian philosophy was not a remote intellectual project detached from the power struggles taking place in Roman society: it was both a response to widespread social upheaval and an attempt to engineer far-reaching cultural transformation.

Cicero's project of Romanizing Greek philosophy identified and synthesized the elements of the Hellenic legacy that could be repackaged into a practical philosophy that would serve the needs of educated Romans in the Late Republic, at a time when Rome was rapidly extending its territorial holdings, especially in Greece (Corbeill 2013, 11) (Hind 1992, 153-54). Cicero's intellectual appropriation of Plato's Socratic caesura to ground a practical philosophy suited for Rome was preceded and accompanied by the material appropriation of Greek libraries and the exploitation of educated Greek slaves and immigrants. Cicero would not have been able

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[60] Donald J. Zeyl uses 'flattery' (Plato 1987); Walter Hamilton and Chris Emlyn-Jones opt for 'pandering' (Plato 2004)

to assert himself as the Roman Plato, as signalled in the titles *De Republica* and *De Legibus*, if he had not been able to draw on the material resources, recording and storage technologies, and intellectual capital, made available through military conquest and political domination.

So, Cicero's emphasis on the practical value of philosophy can be elucidated by situating his efforts within a specific social-cultural context. In Book I of *Tusculanae Disputationes* Cicero confirms Roman supremacy over Greece: Roman discoveries are said to have surpassed or improved upon those of the Greeks; the Roman private and public spheres are clearly superior in terms of manners, habits, customs and laws; and Roman eminence in military valour and discipline has been demonstrated. Cicero acknowledges the Greek dominance in learning, literature and philosophy, but this is attributed to the esteem with which these studies are held in Roman culture. If arts and skills are esteemed in Rome, they flourish, and their Roman practitioners excel. Hence Roman orators have managed to equal or surpass their Greek counterparts because of the reputation gained through this art. Having contributed to the elevation of Roman oratory, Cicero aims to raise philosophy from its low ebb, as a service to his countrymen (*Tusc*. 1.1-3).

In order to raise the status of philosophy, Cicero had to counter the negative perception of philosophy that prevailed in his broader thought collective. Sean McConnell focuses on the distinction between intellectual pursuits that were viewed as escapism and those which were compatible with "active political or public life" (2014, 57). Therefore, when Cicero praises philosophy:

> The force of these passages relies largely on established negative attitudes on the part of the Roman audience towards philosophical pursuits, which they associated with Greeks, the apolitical Epicurean life of pleasure, idle *otium*, debauchery, useless theorising, and so forth. Cicero took care to justify his own intellectual pursuits in such a way as to avoid adverse criticism of this kind. (McConnell 2014, 56)

Cicero's identification with Plato and his practically-oriented Socrates was thus part of a strategy which sought to pry philosophy away from its association with idle speculation and to make it an essential component of political practice, thereby bringing ancient philosophy "down to the forum, the council chamber, and the very camp itself", as Cicero wrote to Cato (*Epistulae ad familiares* 15.4.16) (Yonge 2014).

In essence, Cicero's active *otium* project appropriated a thought style from a subjugated Greek city-state previously renowned for its colonizing, imperial and hegemonic tendencies,

and repurposed it for the needs of the Late Republic, which was giving full rein to its own imperialist tendencies. Sulla's siege of Athens in 88-86 BC and wholesale plunder led to many works of Greek philosophy being brought to Rome for the first time, including even Aristotle's library (Griffin 1994, 693) (Marsh 2013). The brutality of the siege and Pompey's subsequent conquests of Greece in the 60s resulted in a two-way movement of intellectuals: on the one hand, educated Greeks came to Rome as slaves or refugees (Philo of Larissa being an example of the latter), and their literacy, knowledge and skills made them prized teachers, scribes and librarians; on the other hand, young Romans like Cicero, Caesar and Cato the Younger travelled to Greece and made a point of seeking out and listening to philosophers. Some, like Cicero, spent extended periods studying philosophy in Athens and Rhodes, as part of a "classical equivalent of an eighteenth-century grand tour" (Everitt 2001, 118), and thus came into direct contact with Stoics, Epicureans and Sceptics (Rawson 1985) (Zetzel 1999) (Corbeill 2013).

As predicted by Fleck's conception of communication between thought collectives (Fleck 1936 [1986], 88), Cicero's transmission of the Greek thought styles across geographic and temporal distances to educated Roman readers involved transformations, in the form of strategic selections, suppressions and emphasis. So, in addition to the critical-synthetic alignment with the Socratic thought style (as characterized by Plato), and the rehabilitation of oratory mentioned above, in Book I of *De Republica* Cicero countered the Aristotelian conception of knowledge for its own sake as the highest form of wisdom (*Met*. 982a) by insisting that "virtue is not some kind of knowledge to be possessed without using it: even if the intellectual possession of knowledge can be maintained without use, virtue consists entirely in its employment" (*De Rep*. I.2). Cicero thereby emphasizes Plato's real-world application of philosophy (best expressed in his *Seventh Letter* and his involvement in Sicily) and rejects the Aristotelian valorisation of disinterested theorising, which was frowned upon in Roman culture. While positioning himself as the Roman Plato, Cicero's ideal state is not a mere theoretical construction or hypothetical thought experiment, but the Roman state "restored to its idealized past condition" (Griffin 1994, 717). In a key modification of Athenian philosophy, the Ciceronian thought style emphasised practical experience over theoretical study, arguing "for *phronêsis* over *sophia*, for *prudentia* over *sapienta*" (Zetzel 2003, 131). Thus, a Roman philosopher was depicted as the optimal guide of the Republic if he was committed to deploying his broad education, oratory skills and sceptical openness to ethical-political issues in the cut and thrust of the Senate.

The emergence of Ciceronian-Roman philosophy as a unique thought style distinct from Athenian Greek philosophies and its 'Hellenistic'[61] offshoots was determined by the interaction between specific Greek and Roman philosophical thought collectives over the course of centuries, and between the interaction between Cicero and his contemporaries and a more general Roman thought collective formed from representatives of the Roman ruling class and educated citizens that were hostile to the foreign practices associated with philosophy. The philosophical thought collectives (or 'schools'), e.g. the Platonic Academy, the Peripatetic school, the Stoa, the Epicureans, were reconstructed from the ideas and positions attributed to specific individuals and their followers (e.g. Zeno of Citium, Epicurus, Arcesilaus, Philo of Larissa, Antiochus). The interaction was either remote and written, occurring as the one-way transmission of ideas and a thought style from an earlier period to a later one, with later thought collectives responding with interpretation and further transmission, or it involved more direct spoken and written exchange (e.g. as can be presumed from the coexistence, proximity and related positions of the Stoics, the Academy, and the Epicurean community, in Hellenistic Athens during the third century BC (Long and Sedley 1987, 1-6); and as is evident from Cicero's letters and dialogical references to his contemporaries, e.g. Varro, Brutus and Atticus). The interaction between philosophical thought collectives and the more traditional general thought collective has to be reconstructed via the texts of the pro-Hellenic Roman thought collective, which report on the public mockery of and hostility towards philhellenism (e.g. *Fin.* 1.8-9). The extent of the general odium associated with Greek culture and philosophy is indicated in *De Oratore*, where Cicero describes the strategies employed by L. Crassus and M. Antonius to hide their knowledge and fluency in Greek:

> There was nevertheless this point of difference between the two men, that Crassus did not so much wish to be thought to have learned nothing, as to have the reputation of looking down upon learning, and of placing the wisdom of our own fellow-countrymen above that of the Greeks in all departments while Antonius held that his speeches would be the more acceptable to a nation like ours, if it were thought that he had never engaged in study at all. Thus the one expected to grow in influence by being thought to hold a poor opinion of the Greeks, and the other by seeming never even to have heard of them. (*De Or*. II. i. 4) (Sutton 1942, 199-201)

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[61] 'Hellenistic' is used in the scholarly literature (Long and Sedley 1987) to denote the period from the death of Alexander to the emergence of the Roman Empire. However, the term seems to have emerged in the 18th-19th centuries (Hoad 1996), thus it is an organizational category coined by a modern thought style. Cicero did not make such a distinction, just referring to 'the Greeks' (*Graeci*).

In this passage, Cicero, writing in 55 BC, indicates that in 91 BC, the time when his fictional dialogue was supposed to have taken place, philosophy was far from a dominant or even securely established discourse in Roman society. Even if the ideas and practices associated with philosophy had become more acceptable by the time of writing, the fact that Cicero explicitly advocated on behalf of a Romanized philosophy in 55 BC, and again in the intensely productive years 45-44 BC before his murder by the Second Triumvirate in 43 BC, suggests that it was by no means inevitable that the thought style of Cicero and his circle would become dominant and be transmitted to future generations.

Fleck's account of how a new thought style develops from a traditional thought style argues that periods of intellectual unrest allow a dissimilarity of views to emerge. A different intellectual mood is created; there are shifts of interest, and alternate pictures, views and forms can be seen. Content and motives from other fields are added. The new thought style has to overcome inhibiting resistance (Fleck 1935b [1979], 72-77). The period of the Late Republic, and in particular the years 91-44 BC covered by Cicero's writing, was one of unprecedented social turmoil, involving two civil wars and the eventual defeat of the Republic as a political form. Cicero's works, by combining elements of Greek and Hellenistic thought styles with the Roman practice of political oratory, and by explicitly stating their educational function, can be viewed as attempts to overcome the resistance of the traditional nativist-xenophobic thought collective. Thus, to a certain extent, Cicero fulfils the function of a strong individual who, like Vesalius, in the midst of intellectual unrest, imposes their will and vision on the traditional thought collective: "One has to create another mental readiness and to educate people to live in it" (Fleck 1935b [1979], 77). However, as with the case of Vesalius (as covered in section 3.4.2 of the present work), the emergence and transmission of Cicero's thought style was facilitated and determined by a range of social and cultural factors.

Firstly, the construction of a self-identified Roman philosophy on the basis of accumulated rival Athenian and Hellenistic philosophies required the widespread availability of technologies and resources that could be channelled into recording, storing, organizing and evaluating this extracted repository. Hence, before a public figure like Cicero could even begin to single out and reformulate the elements of Greek thought that might be beneficial to Roman statecraft, an apparatus of cultural appropriation and reproduction had to be firmly in place.

On the material level, manuscripts, entire libraries and educated Greeks had to be captured and brought to Rome. The scale of the appropriation allowed members of the patrician class to begin amassing private libraries in their villas. Prior to the emergence of public libraries and a fully-fledged book trade in the imperial era, in the late Republic the creation of private

libraries was dependent on aristocratic social networks and privately owned slaves: Greek texts were exchanged and circulated between the villas dotted around the countryside outside of Rome, in which educated Greek slaves were prized 'possessions'—from copyists to expert grammarians like Tyrannion of Amisus, who organized Cicero's library (Griffin 1994, 693-94).

Secondly, on the intellectual level, the deliberate construction of a distinct Roman thought style required, firstly, embracing and developing analytical tools derived from Athenian and Hellenistic philosophical schools, and secondly, adopting new attitudes to education. In terms of analytical tools, Roman writers like Varro, Nepos and Cicero used the tools of Greek analysis and self-reflection to consider Roman institutions, traditions and values, thus explicitly comparing Greek and Roman culture (Griffin 1994, 706-07). Hence, awareness of the unique identity and characteristics of Roman society, legislation and virtues arose from juxtapositions with their Greek equivalents. James Zetzel argues that reflection on the roles that Greek cultural artefacts played in Roman society actually constituted "anthropologies of culture", or in Cicero's case even a "sociology of culture", since his approach was both comparative and normative (2003, 134).

When it comes to education, if Roman philosophy was to surpass and supplant the hegemony of Greek philosophy, its ideas would have to be broadly accessible to the general thought collective of the ruling class and thus communicated in Latin. Since Greek remained the *lingua franca* in the Mediterranean region well into the imperial period, asserting the dominance of Roman philosophy involved the adoption of complex long-term strategies with regard to Greek and Latin. Firstly, since Greek culture was the basic resource for ideas and models, their importation into Roman culture required large-scale translation. In the field of cultural production, translation was a key area of Roman innovation: "As the Greeks rarely translated works from other languages for their own use, there were no treatises on the subject to guide Roman writers. […] Latin translators had to grasp the difference in character of two languages and preserve the genius of their own while developing its full potential" (Griffin 1994, 700). Secondly, since Greek was the language of a subjugated people, the valorisation of Hellenic culture was inherently problematic, especially as this culture was identified by some as the source of the Greeks' debauchery and defeat: "Greek learning, which had been deracinated by excessive cleverness from its own society, could only be rescued, or even understood, by anchoring it once more in a social and moral context – in the service of Roman tradition and Roman values" (Zetzel 2003, 137). Hence, for the pro-Hellenic Roman thought collective it was essential for Roman boys to learn Greek and be exposed to Greek rhetorical models, whether at private schools or in domestic settings, but over the course of decades

increasing importance was attached to studying language and literature (*grammatica*) in both Greek and Latin, and Cicero's broad conception of education ultimately argued that Latin rhetorical training was an essential component of preparation for public life in the Republic (Griffin 1994, 690-92).

Thirdly, studies of social and class conflict in Roman society during Cicero's lifetime also support Fleck's thesis that transformations in thought style occur during periods of "intellectual unrest" (1935b [1979], 76-77) and "general social confusion" (1935a [1979], 177). According to Peter Brunt's classic revisionist account (1971), the internal strife that beset the Republic from 133 to 27 BC, epitomized by the outbreak of two civil wars, was caused—or at least exacerbated by—the wars of conquest and the importation of slaves into the Italian peninsula. If conflicts between the patricians, rich plebians and the poor were temporarily resolved by annexations of enemy territory, since land was sometimes distributed to the poor, imperial expansion ultimately deepened the economic divide. The economic basis of the Republic shifted from agriculture and trade to war and government. The abundance of slave labour that resulted from military conquest had two main consequences: firstly, the Roman army could draw on this pool of unemployed labour through conscription; secondly, free men were not needed to work the land which fed the armies, and were thus unable to make a living and raise families (Brunt 1971, 19). However, while free men were impoverished, "The profits of empire enabled the upper classes to import hundreds of thousands of slaves, whole cargoes of Greek art, luxuries of every kind, and to buy up lands, stock them with cattle or turn them into the orchards Varro admired" (Brunt 1971, 40). In a more recent study, Clifford Ando estimates that two to four million slaves were imported into Italy in the last two centuries of the Republic. Ando also reiterates Brunt's central thesis, namely that the resulting destabilization led to demands for the revenues of empire to "be used to restore some measure of economic and demographic stability", and that the pressure of these demands on the Roman aristocracy ultimately "proved fatal to the republic" (Ando 2011).

Cicero directly benefited from the imperial project and explicitly defended the interests of the propertied class in his speeches. In 51 BC, and thus the year in which *De Republica* was probably written, Cicero reluctantly went to southern Anatolia to serve as proconsul of Cilicia, where he managed to pocket 550,000 *denarii* in a single year, without resorting to corruption (Brunt 1971, 40). As the patricians amassed wealth and indulged their Hellenic tastes and pretensions in the luxury of their villas and estates, the situation of the urban populace deteriorated. In addition to unemployment and soaring grain prices, the urban poor had to contend with crammed and unsanitary living conditions. Food and rent riots were common

occurrences, armed gangs roamed the streets and countryside, and as a result of the two civil wars that raged during Cicero's lifetime—in 83-81 BC and 49-45 BC—violence became endemic in the city and countryside (Brunt 1971, 111-127).

In his Marxist account of class struggle in the Late Republic, de Ste Croix shows that throughout these tumultuous times Cicero consistently stood on the side of the senatorial class and used his oratory to pour scorn on the *populares*, such as Grachus, Saturninus, Cataline and Caesar, as well as their lower-class supporters (de Ste Croix 1981, 354). Cicero was resolutely opposed to the "the wretched half-starved populace" (*To Atticus* I, 16) and democratic institutions like popular assemblies. In his 59 BC defence of L. Valerius Flaccus, Cicero revealed the limits of his Hellenism: the difference between Rome and the Greek republics is that the former does not allow popular assemblies "any authority to make laws", while Greece "which once flourished with riches, and power, and glory, fell owing to that one evil, the immoderate liberty and licentiousness of the popular assemblies" (*Pro Flacco* §16). Class hatred is explicit in Cicero's descriptions of shopkeepers, artisans and the common people as the worthless and ignorant "dregs of the city" (§ 18-19).

From this perspective, the Ciceronian thought style functioned as an ideology, a tool of control and repression in the service of the propertied class (as outlined in section 3.5.2 of the present work). The combination of selective elements of Greek thought, e.g. Socratic *polis-*based moral philosophy, Plato's anti-democratic political philosophy, and Peripatetic rhetoric, with uniquely Roman conceptions of oratory, civic values and education, enabled Cicero and his social network to construct a thought style that sought to uphold the hierarchy and traditions of the *status quo* and stave off the demands of the common people and the demagogic *populares* who claimed to represent their interests. The emergence of the Ciceronian thought style, as a new and distinct Roman philosophy in the midst of the internal strife of the Late Republic, can be viewed as an innovation that applied reformulated Greek concepts and strategies in order to maintain the traditions of the past. In other words, a change in thought style came about through an effort to prevent social change.

To sum up, on the basis of source texts and scholarly literature, the Ciceronian-Socratic caesura—which reiterated the Platonic-Socratic caesura's rejection of naturalism and suppression of sophist philosophy, but which also placed even more emphasis on the practical, urban focus of the Socratic thought style by reuniting philosophy and oratory—can be framed as a discursive strategy adopted by a specific thought collective, i.e. Cicero's traditional patrician social network. Cicero's *De Oratore* and *De Republica* dramatize the emergence of this thought style as this network of erudite patricians consciously defined their philosophy as

distinct from and superior to that of the Greeks. The techno-economic context, involving the appropriation of educated slaves, texts, libraries and analytical tools, allowed this thought collective to challenge the hegemony of Greek thought styles. At the same time, the flipside of this mass enslavement was an abundance of slave labour that profoundly upset social relations in the Italian peninsula and contributed to the social conflict that tore the Republic apart. On the one hand, the emergence of this new thought style in the Late Republic—a period of internal political upheaval and external expansion—was a key determinant of the cultural change leading to Rome's self-identification as the supreme power; on the other hand, this thought style functioned as a political ideology— as a conceptual framework and set of discursive practices that were inseparable from class conflict.

4.4.5 Conclusion – the Transmission of the Socratic caesura

The image of Socrates as the first thinker or theorist to turn his gaze away from the inexplicable cosmos to the everyday life of the polis is far from neutral: it was an image that was constructed, developed, revised and passed on by thought collectives that had very specific agendas. The Socratic caesura is entangled in the suppression and devaluation of public oratory and communication with the *demos*, and other forms of social theorising (reflective historical accounts, tragedy) in 5th and 4th century Athens; and in the appropriation and Romanisation of Greek thought by a section of the Roman elite that developed its thought style in opposition to the *populares*, who claimed to champion the common people. The Socratic caesura was basically articulated by elite thought collectives that defined philosophy as elite refection and communication *about* the polis, but not *with* the demos. This conclusion is heavily indebted to Ober's *Mass and Elite in Democratic Athens* (1989).

The use of the term "Presocratic" is grounded in the Socratic caesura, and it has had unfortunate consequences for the study of ancient thought and communication. Above all, the term "Presocratic" follows Plato's homogenizing strategy and effectively suppresses the heterogeneity of thought that is evident in the surviving texts from the 6th and 5th centuries BC. A.A. Long hits the nail on the head:

> By representing the early Greek philosophers as conceptually or methodologically Presocratic, we have tended to overlook or marginalise their interest in such topics as I have already mentioned, including ethics, psychology, theology, and epistemology […]. The Presocratic label is also misleading because of its generality. Vague though it is, it suggests that all the early Greek

philosophers are easily identifiable as a group, and chiefly so by their non-Socratic features. In that way, the term conceals the fluidity and diversity I have already emphasized (Long 1999, 6-7)

I have attempted to demonstrate that Fleck's theory of thought styles can be used to shed light on this fluidity and diversity.

In the Renaissance, Cicero's writings had been rediscovered, printed, incorporated into the Latin curriculum, and translated, before Plato's key dialogues, such as *Republic* and *Laws*, became widely available to the European reading public. This fact is significant because the Ciceronian-Socratic caesura and Cicero's practical republicanism (influenced by Plato's political writings) influenced the diverse thought styles that emerged between 1350 and 1789—subsequently labelled as 'humanist', 'Enlightenment' etc.—at a time when Plato's works were either largely unknown, stigmatized as dangerously incompatible with Christian doctrine, or obscured by layers of 'Neoplatonist' interpretation. Hence it was Cicero's writings that the Italian humanists deployed to begin countering the stranglehold of institutionalized Aristotelian thought (Wilson 1992) (Marsh 2013), and it was Cicero's moral philosophy that inspired British philosophers of the seventeenth and eighteenth centuries, such as Toland, Locke, Shaftesbury[62] and Hume, as they gradually sought to stake out a field of moral philosophy free from theological control (Fox 2013) (Stuart-Buttle 2018).

I would suggest that while the Platonic philosophy influenced the scientific revolution in its Neoplatonist derivation, as is evident to varying degrees from the writings of Copernicus, Kepler and Galileo, see e.g., (Carré 1955) (Martens 2000), the Platonic-Socratic caesura, which distinguished philosophy from natural science in disciplinary terms and asserted the supremacy of the former, really only made its reappearance in German scholarship of the late eighteenth century and early nineteenth century. On this reading, the Platonic-Socratic caesura was reanimated in the institutional struggles that took place in the German universities at the time of the French Revolution and during the Napoleonic Wars.

In these decades, scholars in German philosophy faculties, including specialists in *Altertumswissenschaft* (classical studies), asserted and finally achieved institutional

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[62] The Earl of Shaftesbury's role in transmitting the Socratic caesura to the German universities in interesting. For Shaftesbury, the figure of Socrates, particularly Xenophon's Socrates, provided the model for the project of philosophy, as he "helped to underpin Shaftesbury's interest in philosophical worldliness since Socrates carried out his quest in public through a process of public conversation in the midst of the city-state" (Klein 1994, xxxiv-v). Rebekkah Horlacher (2017) traces the influence of Shaftesbury's *Characteristicks of Men, Manners, Opinions, Times* (1711), which described the process of self-examination and self-purification as "forming" or "formation", on the concept of "Bildung" that was circulated among German intellectuals in the 18th century (Chapters 3 and 4).

independence from the theology faculty. In contrast to the British and French focus on Ancient Rome, German scholars like Friedrich August Wolf, Wilhelm von Humboldt and Georg Wilhelm Friedrich Hegel identified the culture of Ancient Greece as having primary and of unique spiritual importance (Marchand 1996, 3-35). The liberation of the philosophy faculty and classical studies from the control of the theology faculty, and the elevation of philosophy to the status of master discipline in Hegel's writing and the Humboldtian university, was inseparable from critical reflection that considered German culture in the light of Ancient Greek Culture, which identified the beleaguered German states with the embattled Greek states of antiquity, and which constructed the Ancient Greeks and modern Germans as unique spiritual *Volk* distinguished by their philosophical consciousness. In the late *Aufklärung* and in the midst of revolutionary wars, German scholars reclaimed Greek philosophy and culture from the stigma of paganism and largely eschewed attempting to reconcile Greek philosophy with Christian doctrine.

Thus Johann Augustus Eberhard's coining of the term "*vorsokratische Philosophie"* (Presocratic Philosophy) in 1788 (Laks 2018, 1), while employed as a philosophy professor at the University of Halle, reintroduced the Platonic-Socratic caesura and began the process of its institutionalisation. This was one of the first steps of a process in which philosophy, the discipline which defined itself as the power to distinguish between disciplines and organize them into hierarchies, asserted its freedom from theology and its dominance over the natural sciences. The positioning of Socrates as the true beginning of philosophy is bound up with the necessity of separating philosophy as a university discipline from other disciplines and thus carving out an independent domain of enquiry within the institution of the University.

The transmission of the Socratic caesura from Ancient Greece and Rome to the German universities at the turn of the nineteenth centuries involved the interaction of numerous thought collectives at various times and locations, including Byzantine Platonists, Italian humanists, Italian and northern European Neoplatonists, English empiricists, German *Aufklärer*, German Romantics etc. A sufficiently detailed account of this transmission lies beyond the scope of the present work, unfortunately.

In the scholarship of the modern era, the consolidation of the Socratic caesura was contested and somewhat convoluted. With the institutionalisation of classical studies (*Altertumswissenschaft*) as a distinct subject in the latter half of the 18th century in the German universities, the term *Vorsokratiker* was coined by Johann August Eberhard in 1788. As Patricia Curd highlights, the term "Presocratics" is problematic in terms of both chronology and content,

since some thinkers often classed as Presocratic, such as the sophists, were Socrates' contemporaries and shared his focus on practical and moral matters (2011, 1).

Laks identifies the sophists' and Socrates' shared focus on "man" as a reason why the term "Presocratics" was initially resisted in German scholarship. For example, in *Geschichte der Philsoophie alter Zeit* (1815), W.T. Krug positioned Plato rather than Socrates as the turning point in Greek philosophy (Laks 2018, 19). This indecision as to where to place the caesura is evident in Hegel's reflections on the development of Greek thought. In his *Lectures of the History of Philosophy* (1825-1826) Hegel treats Socrates as "a major turning point in the world's consciousness" yet also stresses that Socrates's focus on "the subject's consciousness and thinking" is "something that he has in common with the Sophists, that is, with the culture of the time" (Hegel 2006, 124). Thus Socrates is characterised as a rupture, but at the same time is relativized and embedded within a process of dialectical continuity. In the next chapter, we will zoom forward to Hegel's lectures and see what happens when Fleck's concepts are applied in this context.

Chapter 5: Applying Fleck's Theory to the Hegelian concept of *Bildung* as a development of *paideia*

5.1 Overview

At the turn of the 18th and 19th centuries, German/Prussian university-based philosophy consciously reactivated the distinctions and categories of the Platonic-Athenian thought style and, through the institutionalization of philosophy as the master discipline, set in place disciplinary boundaries and hierarchies that became entrenched in scholarly philosophy and in literary, historical and cultural studies. One of the chief agents of this reactivation and institutionalization was, of course, Georg Wilhelm Friedrich Hegel. This chapter will attempt to demonstrate that Hegel's conception of philosophy and strategies were very much determined by the thought collectives in which he was immersed.

5.2 Hegel's Conception of *Bildung* in the *Lectures on the History of Philosophy*

The next sections will firstly analyse Hegel's internal differentiation of philosophy as a cultural practice, and then apply the tools provided by Fleck's theory to shed light on the cultural-historical and institutional factors that had a determinative influence on Hegel's textual strategies.

In the history of the study of Greek thought, Hegel can be identified as a professional, scholarly philosopher who made a decisive contribution to the development of the 'from myth to logos' paradigm discussed in Chapter 4. Hegel's reconstruction of the history of philosophy can be read as a prototypical example of philosophy's habitual attempt to differentiate itself as a discipline, by tracing its ancestry back to the emergence of an absolute discontinuity in the history of human thought; or, in Fleck's terms, the appearance of an entirely new thought style.

Although Johann August Eberhard had coined the term *Vorsokratiker* (Presocratic) in 1788, thereby denoting the arrival of Socrates as a caesura in the history of Greek philosophy (Perilli 2018, 105),[63] Hegel does not employ the term in his *Lectures on the History of*

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[63] Eberhard's Chapter "Erſte Periode Vorſokratiſche Philoſophie" of *Allgemeine Geschichte der Philosophie zum Gebrauch akademischer Vorlesungen* (1788) can be viewed online at
https://books.google.pl/books?id=d409AAAAcAAJ&pg=PA47

Philosophy (*Vorlesungen über die Geschichte der Philosophie*). Instead, Hegel divides Greek Philosophy into three periods: *From Thales to Aristotle*, *Dogmatic and Skeptical Philosophy*, and *Neoplatonic Philosophy*. The first overarching progression, *Von Thales bis Aristoteles,* is divided into three progressions: *Von Thales bis Anaxagoras* and *Von den Sophisten bis zu den Sokratikern,* which then culminates with *Platon und Aristoteles*. Thus, rather than treat the appearance of Socrates as an absolute rupture in Greek philosophy, Socratic thought is subsumed within the series of progressions constituting the universal dialectical process through which the universal world spirit gradually comes to know itself.

Hegel's *Lectures on the History of Philosophy*, which refer to and insert themselves within the burgeoning field of German scholarship focused on ancient Greek philosophy, identify two main formations: Greek philosophy and German philosophy. Thus while philosophy is viewed as developing as an organic, progressive whole, the progress is gradual and to some extent interrupted, or punctuated with periods of 'fermentation', since the world spirit takes its time and "has the wherewithal to make its way through a multitude of nations, peoples and the like" (Hegel 2009, 96). Thus, crucially, Hegel treats "the Greeks" (*die Griechen*) as a nation, or people (*Volk*), who are conceived of as constituting homogenous spiritual unity, standing in opposition to "the Orientals"; and in cultural terms "the Greek World" is distinguished from and stands in opposition to "the Orient". Furthermore, despite the fact its representatives were spread over a wide geographical area, ranging from the thinkers of Asia Minor (e.g. Thales, Anaximander, Heraclitus, Democritus) to the western "Greek Italians" (Pythagoras, Parmenides, Zeno, Empedocles) (Hegel 2006, 16), for Hegel it is possible to speak of "Greek philosophy". Since Hegel famously excluded the Oriental world from the history of philosophy, due to the subject in the Oriental world being submerged in the objective domain and the single individual lacking political freedom and rights (Hegel 2009, 89-90), this entails that the emergence of philosophy in Greece had to be cast as the emergence of something entirely new in the history of the world spirit.

In terms of Fleck's comments on the investigation of earlier thought styles in *The Problem of Epistemology*, namely our tendency to "involuntarily substitute today's content" for the words and ideas we encounter in "scientific literary monuments" (Fleck 1936 [1986], 89, 91), Hegel's identification of "*die Griechen*" as a distinct "*Volk*' is a clear example of such substitution. The growing preoccupation with the Germans as a nation or people, following Prussia's defeat by the Napoleonic forces at the Battle of Jena–Auerstedt (1806), reflected in Johann Gottlieb Fichte's abandonment of internationalism and the adoption a more nationalistic conception of unified German culture, and which would lead to the founding of the

"Humboldtian" University of Berlin in (1810) (Hofstetter 2001, 92-93) (Kwiek 2006), was part and parcel of the intellectual unrest that formed the backdrop for Hegel's *Lectures on the History of Philosophy*, which were delivered in the tumultuous period spanning 1806-1831, at the Universities of Jena, Heidelberg and Berlin. Thus, when Hegel describes the spiritual unity of the Greek people and their culture—despite geographical dispersal, and the polarized East-West branches of Greek philosophy coming together in Athens "for the first time at a central point" (Hegel 2006, 16)—he could just as well be describing the German *Volk*, German philosophy and Berlin.

A key point here is that while Fleck cautions against such substitutions, which can be construed as his advocating sensitivity to the passive elements in the interaction with ancient texts as objects of cognition, Hegel embraces appropriations and substitutions. As this section will seek to demonstrate, in Hegel's thought style, Modern Philosophy differentiates itself from Ancient Philosophy precisely through such conscious substitutions.

In Hegel's framework, philosophy arrives through a "spiritual rebirth" (*geistige Wiedergeburt*). The first birth provides natural life, consciousness and knowledge, but it is only the second birth that provides spiritual life. Hegel's conception suggests the Greeks underwent this spiritual rebirth as a nation or people; which entails the world spirit entered a stage of its development and self-awareness through the philosophy of the Greek people.

Hegel acknowledges that the emergence of Greek art and science was influenced by external stimuli, but emphasizes Greek agency and creativity:

> In dealing with Greek art and life we are led to Asia and Egypt. But we can also get along without reverting to these other lands, and we can locate the germination, growth, and blossoming of Greek science and art within Greek life itself; even the source of its decay is already embedded in it. What came from elsewhere was but the raw material or impetus for them; and they transformed or recast it. The spiritual ethos is precisely characteristic of the Greeks themselves, the form of art and science that is the pure form of thinking. So in order to grasp Greek life and Greek philosophy we need look no further than the Greeks themselves. They gave a spiritual rebirth to what they received, and the spiritual is none other than that which has been born again. (Hegel 2006, 10)

For Hegel, the Greeks were fundamentally a distinct spiritual people, whose thought emerged internally, from their unique "primordial elements" (*uranfänglichen Elementen*). In the following passage, Hegel seems to indicate, obliquely, that poetry played a key role in the first phase of this emergence:

> They have preserved all of their beginnings—a history of the world (a cosmogony) and of the
> gods (a theogony), and also a history of how the human race came to possess fire, agriculture
> and the olive tree. The memories of these earliest beginnings of all culture, which constitute
> the initial transition out of primeval savagery, the Greeks have gratefully preserved. Thus they
> are at home with themselves even in their outward, historical aspect. So too the development
> of their thought emerged or unfolded from their own primordial elements, and we need not
> seek for some further external stimulus, some historical tie [with other peoples]. (Hegel 2006,
> 10-11) [64]

The reference to cosmogony and theogony, history and the beginnings of culture would seem to suggest, at the very least, that Hesiod contributed to the Greeks' 'initial transition' from primeval savagery.

Hegel's explicit references to Homer and Hesiod in *Lectures on the History of Philosophy* are both scant and revealing. For example, one crucial reference can be found in his reconstruction of the sophists, which draws heavily on Plato's *Protagoras*; it is vital because it reveals how the position and status that Hegel assigns to mythology, religion and poetry hinges on his conception of *Bildung*.

In his recap of Plato's text, Hegel tends to treat Plato's depiction of Protagoras as providing a reliable account of sophist thought, and repeats key points mostly without commentary or elaboration. Thus the following passage from Plato, where Protagoras claims that Homer and Hesiod practised the art of sophistry under the cloak of poetry:

> Now I tell you that sophistry is an ancient art, and those men of ancient times who practised
> it, fearing the odium it involved, disguised it in a decent dress, sometimes of poetry [ποίησις
> – poiesis], as in the case of Homer, Hesiod, and Simonides sometimes of mystic rites and
> soothsayings, as did Orpheus, Musaeus and their sects; and sometimes too, I have observed,
> of athletics,. […] Hence the road I have taken is one entirely opposite to theirs: I admit that I
> am a sophist and that I educate men [παιδεύειν ἀνθρώπους]; and I consider this precaution,
> of admitting rather than denying, the better of the two. (Prot. 316d, 317d) (Lamb 1967)

Is paraphrased and glossed by Hegel as follows:

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[64] "Die Entwicklung des Gedankens ist bei ihnen von ihren uranfänglichen Elementen hervorgetreten, hat sich entfaltet, und wir können sie betrachten, ohne weitere äußere Veranlassungen aufsuchen zu müssen" (Hegel, Vorlesungen über die Geschichte der Philosophie I 1986, 175-176)

He [Protagoras] maintains that the art of the Sophists is ancient, although just in order to avoid giving offense those who have practised it have given it a cloak under which they concealed it. Some of the ones from whom culture derived, such persons as Homer and Hesiod, employed poetry [as a cloak], others such as Musaeus and Orpheus employed the mysteries and oracular sayings, other again gymnastics, and others music. All of these arts are modes whereby human beings impart culture. […] Protagoras himself professes to have gone the other way and says openly that he is a Sophist, a teacher of culture, that his business is to give people spiritual culture (παιδεύειν ἀνθρώπους), just as the other have done—Homer, Hesiod and the like. (Hegel 2006, 112-113)[65]

Hegel's gloss *Diese Kunst ist Bildung überhaupt* (Hegel 1986, 415)—that the art of the sophists is 'general culture' places the emphasis on *Bildung*, and thus a conception of culture that was very specific to the German philosophy of the late eighteenth and early nineteenth centuries. Hegel treats the Greek concept of *paideia*, which Plato's Protagoras uses to encompass the physical mastery developed in athletic training, the rituals and models of behaviour represented in poetry, and the shaping of human minds practised by the sophists, as being an earlier stage of the fully-developed eighteenth-century German concept of *Bildung*, which combines elements of cultural formation, enlightenment and self-cultivation (Pinkard 2000, 26, 49).

Terry Pinkard emphasizes that the concept of *Bildung* had preoccupied Hegel since his youth, when he encountered Moses Mendelssohn's *What is Enlightenment?*, an essay which seemed to treat Enlightenment and *Bildung* as identical (Pinkard 2000, 49). For Hegel, the concept of *Bildung* was inseparable from his passionate support of the French Revolution: the moral and spiritual renewal of Germany that would come about when "men of Bildung" ruled the country:

The idea itself of *Bildung* was one of those things that was in the air at the time and came with considerable controversy attached to it. By Hegel's time, the idea had been distinguished from that of *Erziehung*, education. *Bildung* incorporated within itself the notion of true education and cultivation as in turn demanding self-formation. As it were, one could become educated (in the passive tense, represented by the term *Erziehung*), but one had to make oneself into a

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[65] "Hierüber spricht er weitläufig und sagt dabei: »Ich aber behaupte, daß die sophistische Kunst alt ist, daß aber die von den Alten, welche sie übten metacheirizomenous, in Besorgnis, damit anzustoßen« phoboumenoi to epachthes, denn das Ungebildete ist dem Gebildeten feind), »ihr ein Gewand machten und sie verdeckten.« Diese Kunst ist Bildung überhaupt, dasselbe was »ein Teil, wie Homer und Hesiod, in Poesie vorgetragen, andere, wie Orpheus und Musaios, in Mysterien und Orakelsprüche eingehüllt. […] Wenn man sich aber so verhält, so macht man sich verhaßter, setzt sich selbst dem Scheine (Verdachte) aus, Täuscher (Betrüger, panourgon) zu sein. Ich bin darum den entgegengesetzten Weg gegangen und bekenne offen und leugne es nicht homologô, ein Sophist zu sein« (Protagoras führte zuerst den Namen Sophist), und daß mein Geschäft sei, »den Menschen Geistesbildung zu geben *(παιδεύειν ἀνθρώπους)*«, wie die anderen, Homer, Hesiod usf., es auch getan" . (Hegel 1986, 415)

cultivated-educated person (in the active tense, represented by the term *Bildung*). *Bildung* required self-activity, self-development, and self-direction. (Pinkard 2000, 49)

Thus Hegel's treatment of *Bildung* as a later, more developed form of *paideia*, that is, as a direct conceptual descendant, is by no means neutral. And while the Hegelian system can justify this strategy through reference to the gradual awakening of the world spirit being tangible in this conceptual progression, it is also possible to argue that Hegel's word choice is determined by the changing institutional status of philosophy in the German and Prussian states.

As Marek Kwiek has stressed, the concept of *Bildung* was a "strongly-politicized" notion, inseparable from a national aspect and a specific understanding of the role of the university in the state, as conceived and propagated by Fichte and Humboldt (Kwiek 2006). Nigel Tubbs also emphasizes that the state is an essential component of this conception of education: *Bildung* within the Hegelian system is "the process by which ethical life replaces natural need, and it is the maturation of the person from particular to universal, and of family to civil society and state" (Tubbs 2008, 44).

The twenty-five year period during which Hegel delivered and worked on his *Lectures on the History of Philosophy*, that is, from 1806-1831, was a tumultuous one, spanning Napoleon's defeat of Prussia at the Battle of Jena-Auerstedt, the Prussian Reform Movement's far-reaching reforms, and the Congress of Vienna and the subsequent consolidation of Prussian territories. Hence it is quite straightforward to tie the emergence and development of *Bildung* to a period of intellectual unrest, in Fleck's sense of a time when the intellectual mood is conducive to change occurring in a thought collective's thought style.

Moreover, in terms of Fleck's theory, at first sight Hegel's reconstruction of the art of sophistry also seems to provide a relatively straightforward example of a modern thought style brashly interpreting a temporally distant thought style through the lens of its own concepts and obscuring the passive elements of this thought style in the process.

On the one hand, Hegel clearly treats the German concept of *Bildung* as equivalent to the Greek concept of *paideia*, since the words Plato attributes to Protagoras, παιδεύειν ἀνθρώπους (train/teach/educate man), are rendered as *den Menschen Geistesbildung zu geben* (to give man spiritual education), with explicit reference to the Greek in the transcribed text of Hegel's lectures: thus *Geistesbildung* substitutes directly for *paideia*. From the perspective of Fleck's theory of thought styles, Hegel's move can be viewed as the somewhat brutal and arrogant projection of contemporary conceptual elements back into a designated and appropriated proto-idea.

However, Hegel's project has the conceptual antibodies to resist Fleck's epistemological critique at this point, since the Hegelian system legitimizes such treatment of proto-ideas: since the world spirit is characterized by unity, it is one and the same Spirit thinking through the concepts of *paideia* and *Bildung*, and thus the latter can be legitimately viewed— if the tenets of the Hegelian system are accepted—as a mature development of the former. This can be viewed as an example of Hegelian "autoimmunity", or, in other words, "the rigorous acknowledgement of complicity in the imperialisms of the age" that can be found in Hegel's writing (Tubbs, 42).

Throughout his lecture on the sophists, Hegel explicitly and consistently contrasts the *Bildung* of ancient Greece with that of "*der modernen Zeit*" or the "*europäischen Welt*" (Hegel 1986, 420-21). He defines *Bildung* as a vague expression (*unbestimmt*), but suggests that its essence involves our "acquaintance with the general viewpoints that pertain to any object or issue" and being "able to grasp these perspectives in a general way"; thus an educated person (*gebildeter Mensch*) is able to say something about every issue, and is familiar with the different points of view concerning it (Hegel 2006, 111) (Hegel 1986, 410-11). Hegel credits the sophists with introducing such cultivation or *Bildung* to Greek society; and, crucially, he describes this introduction in terms of a shift or break from existing, traditional custom: the sophists awoke the need for subjects to reflect and determine their thinking in response to specific circumstances. Thus, Hegel's reading of Plato's *Protagoras* posits that the sophists provided counsel and instruction on political virtue: young men were to be made aware of their own best interests and the interests of the state, and how to articulate the former in their speaking (Hegel 2006, 111-3).

Ultimately, Hegel's description of the sophists' practices has a distinctly modern ring to it: for the sophists, political virtue is said to pertain to all citizens (*Bürgers*); education is geared towards instructing children in custom and right, with the aim that all become accustomed to "self-regulation in accordance with a law or a rule" (Hegel 2006, 115); and once children have completed their instruction in political virtue, they enter the sphere of the state's constitution, which exerts its influence on the individual and keeps them "within the bounds of law and order" Hegel 2006, 115). The most Hegelian interpretation of the sophists' project comes when Hegel expresses admiration for Protagoras' analogy between instruction in flute-playing and political virtue. The section of Plato's text (Prot. 327a -e) in which Protagoras asks Socrates to consider the consequences of flute-playing being mandated by the 'state', and all citizens being provided with instruction, is summarized by Hegel as follows:

All citizens would master flute-playing to a certain degree, and they would at all events be more proficient than those who had received no instruction. In the same way, the worst citizens of a rational state (*auch die schlechtesten Bürger eines vernünftigen Staats*) are at all events better than those who belong to a people that has no culture, no education, no law (*keine Bildung ist, keine Gerichte, keine Gesetze, keine Nötigung, sie zum Recht zu bilden*). The citizens owe this superiority to the laws, instruction, and culture in their state (*den Gesetzen, dem Unterricht, der Bildung in ihrem Staate*). (Hegel 2006, 116).

If Hegel's reading is compared with the passage from Plato's text, it is evident that Hegel's paraphrase, due to additions and word choices, casts the sophists' attempts to educate Greek citizens in distinctly German or Prussian terms.

Likewise in the present case you must regard any man who appears to you the most unjust (ἄδικος – ádikos) person ever reared among human laws (νόμος – *nomos*) and society as a just (δίκαιος – *díkaios*) man and a craftsman of justice, if he had to stand comparison with people who lacked education (παιδεία – *paideia*) and law courts and laws (νόμος – *nomos*) and any constant compulsion to the pursuit of virtue (ἀρετή - *aretē*), but were a kind of wild folk […] (327c-d) (Lamb 1967)

Thus the *most unjust men reared/educated in the customs and laws* of the hypothetical *polis* evoked by Plato's Protagoras are transformed in Hegel's gloss into *the worst citizens of a rational state*; once again *paideia* is treated as a straightforward equivalent of the German *Bildung*, and the coerced pursuit of *aretē* is equated with the German pursuit of civic virtue (*politische Tugend*). As Fleck's theory makes abundantly clear, any attempt to translate Plato's ancient Greek into nineteenth century German would have inevitably involved conceptual transformations and distortions, since they are inherent to the process whereby ideas are communicated from one thought collective to another, but the issue here is that—at this point in his lecture at least— Hegel does not highlight the equivalences invoked in his glosses, in no way draws attention to the differences residing in the concepts, but instead bluntly substitutes the Greek *polis* with the rational German or Prussian *Staat* and Greek *paideia* with the German *Bildung*.

If it seems unfair to take Hegel to task for not being more Fleckian, that is, for not allowing the passive elements of the Greek concepts to speak more on their own terms, it should be borne in mind that one of Hegel's purposes in his lecture on the sophists is to contrast the culture of ancient Greece with that of modern Europe. Crucially, this contrast is key to the distinction Hegel makes between poetry and religion on the one hand, and philosophy on the

other. And since Hegel's original interpretation of the sophists—*including* Socrates—as the teachers that brought *Bildung überhaupt* (general culture) into existence in Greece, the educator-citizens that trained individuals to reflect on multiple viewpoints and reflect on their own interests and those of the (rational) state, the question that arises here is: What stopped the pophists from being fully-developed Prussian philosopher-burghers, and the purveyors of fully-fledged *Bildung*?

Put simply, Hegel's answer is that it boils down to the religion upon which the sophists' *Bildung* is based. The approach of the sophists is described as "defective" (*Mangelhaftes*), they embraced "one-sided principles" (*einseitige Prinzipien*) and overemphasized the power of subjective determination due to the deficiencies of their religion:

> That the Sophists embraced one-sided principles correlates above all with the fact that in Greece and in Greek Culture there was no such firm foundation as we have in the modern world. Culture (*Bildung*) has entered into the modern world too, but under the aegis and presupposition of the spiritual religion—not under that of a religion of a fanciful imagination (*Religion der Phantasie*). […] In modern Europe the foundation has been a principle that is secure and indeed spiritual, one that in that way satisfies the needs of subjective spirit. All subsequent relationships, [including] the categories of duty and morality, determine themselves on the basis of this absolute, universal principle and are made dependent on it. The inevitable result was that culture did not adopt the multiplicity of orientations that it had among the Greeks and those who disseminated culture in Greece, namely, the Sophists. Confronted there with the religion of fanciful imagination and with undeveloped principles of political relationships, culture could splinter into a great variety of points of view; as a result private or subjective points of view could be established as supreme principles. (Hegel 2006, 116-7) (Hegel 1986, 421)

Here Hegel reiterates (in a more oblique fashion) the argument put forward in the *Introduction* to the *Lectures on the History of Philosophy*, namely that it is only within Christian-Germanic world that philosophy progresses to the "thought of spirit". In this *Introduction*, Hegel asserts that while the Greek religion was the soil from which philosophy grew, philosophy in the Greek world only "developed thought to the point of the idea" (Hegel 2009, 91-2). On the one hand, Greek philosophy develops the subjective principle, the free subject that determines itself, and on the other hand, it arrives at the concept of the objective "intellectual or ideal world" (Hegel 2009, 93). However, one more determination is necessary; one that comes with the Christian religion, namely the unification of the subject and the objective idea in the principle of the "self-

knowing idea, the principle of Christian philosophy" (Hegel 2009, 94). In Hegel's conception, Christianity reveals "the unity of the divine nature with human nature […] This is the Germanic principle, in which the objective idea and humanity are thus united" (Hegel 2009, 95).

Since, in Hegel's system, the *Bildung* of the sophists is grounded in the soil of the fanciful Greek religion, which lacks both the unifying principle of the Christian religion and the support provided by the political institutions of modern Europe, the discovery of the subjective principle necessarily entails a simultaneous splintering into multiple viewpoints and the unlimited expansion of the subject's determinations. Protagoras' thesis that the human being is the measure of all things, which grants total determinative power to the subject, thus emerges following the abandonment of the abstract focus on nature as the one, sensuous universal object which characterised Ionian natural philosophy, and prior to Socrates and Plato's positing an objective, non-sensible ideal world independent of subjective consciousness (the universal "being-in-and-for-self", the content that thought gives itself (Hegel 2006, 121)).

The *Bildung* of the sophists is thus grounded in a fundamental ambiguity, since it is not clear *which subject* is to be educated/cultured. Hegel asks: "is it each human being according to private individuality, so as to make one's particular self the purpose, or is it the human being according to its rational nature and universal essence?" (Hegel 2006, 121). In other words, in sophistic thought, the movement from the particular to the universal has yet to attain it fulfilment: sophistic thought entitles and trains the particular citizen of the *polis* to reflect on and pursue his own individual interests through the determinations of his subjective measures (the one-sided principle); but while Protagoras is portrayed as being aware that the state also has its interests, sophistic thought does not arrive at an objective measure that would subordinate the private or subjective principle to external standards, "supreme principles [*höchste Prinzipien*]", and thus raise the particular citizen to the level of a universal subject who has arrived at full awareness due to the *Bildung* initiated and guided by the rational state.

Thus, to reiterate, the Greek *paideia* of the sophists remains an under-developed *Bildung*, doomed to merely subjective determinations, due to its being rooted in the fanciful Greek religion, prior to the emergence of universal principles of Platonic philosophy and the true, spiritual and unifying principle of the Christian religion and the *Bildung* cultivated by the modern European (Prussian) state.

5.3 The Status of Religion, Myth and Poetry in Hegel's *Lectures on the History of Philosophy*

Given the significant limitations imposed by religion on the development of Greek philosophy, according to Hegel, it is necessary to give broader consideration to the status assigned to religion, mythology and poetry in Hegel's *Lectures on the History of Philosophy*, particularly with regard to how philosophy is distinguished from these forms of cultural expression.

In the Introduction to the *Lectures*, Hegel presents religion, mythology and poetry as sharing certain common characteristics which distinguish them from philosophy. First and foremost, religion, mythology and poetry are all classed as forms of representation, and the apprehension and thinking that is expressed in them is described as "representational" (Hegel 2009, 78). This is tied to the fact that, in the Hegelian system of distinctions, the content of spirit takes an objective form in religion and mythology: the content is apprehended by the sensual imagination as an external object, and is thus represented in sensuous forms (the burning bush that confronted Moses, the relationship of the son begotten of the father) which are drawn from living nature. Similarly, poetry is also said to clothe its content with sensuous representations (Hegel 2009, 78-9). Crucially, philosophy is distinguished from such sensuous, representational forms of grasping and portraying spirit: philosophy deals with the same content, i.e. spirit, but here it is "grasped and posited in the form of thought" (Hegel 2009, 79).

Thus, while situating the thought of Socrates and Plato within a deterministic historical process, Hegel redeploys the negative concept of *memesis*—thus reactivating key Platonic distinctions—to differentiate the type of thought that emerges in Greek philosophy from the thought that is present in Greek religion and mythology. The thought specific to philosophy is the *explicit,* non-representational thought through which spirit becomes conscious of itself as such; in which thought becomes the content of thought itself, in the unity of self-knowing oneness (Hegel 2009, 78-9) (Hegel 1995, 83). In his exclusion of mythology from the domain of philosophy, Hegel follows Aristotle's famous condemnation of myth in *Metaphysics* (III. 4) to adopt a more uncompromising position than Plato in the Republic's assault on *mythos*: despite his criticisms of myths and poetry, Plato still tends to turn to myth to add clarity to pure thought, but according to Hegel, no matter how helpful Plato's use of myth might be, "this form is not suitable to Philosophy" (Hegel 1995, 87). Hence in Hegel's estimation, Plato's *Parmenides*, which abandons such mythical imagery, is a superior work to those which fall back on the poetic resources of myth. Therefore, from this perspective, Hegel's attempt to position Philosophy as the master discipline of pure thought grounded in the Absolute, entails that his system seeks to function, in discursive terms, as an extreme, purified form of Platonism; one that has completely banished mythology and poetry from the territory of Philosophy.

A key issue can be formulated at this point. Obviously, there are factors that are purely internal to Hegel's conceptual system which lead him to re-enact the Platonic exclusion in a more purist form, such as the assumptions that Hegel makes concerning the ontological status of thought and spirit, but there are also external factors that shape and guide Hegel's strategies of differentiation and exclusion. Fleck's theory of thought collectives and thought styles, when combined with conceptual tools borrowed from Marx's economic determinism and from the discourse analysis of institutions, allows light to be shed on some of these external factors.

The reading of Hegel's *Lectures on the History of Philosophy* proposed here is that, just as Plato's *Republic* can be read as being fundamentally concerned with supervising, assimilating and excluding specific practices associated with certain forms of cultural-educational production, Hegel's conception of Philosophy is intimately tied up with a very specific, historically, socially and culturally determined conception of education, namely *Bildung*. I will argue that this conception was externally determined by the changing status and role of the philosophical faculties within the institution of the German University; that this changing status reflected both class struggle within society and university institutions; and that the status of the philosophical faculty and Philosophy was asserted, fought for and maintained in a struggle with other faculties, disciplines and conceptions of philosophy.

In terms of Fleck's theory, the thought collectives that Hegel can be posited as belonging to range from the specific network of philosophers, poets and educators that Hegel communicated with, to the more general, discursively constructed thought collectives that can be posited as training and shaping his thought style, such as 'German Idealism' and 'German Romanticism', 'Lutheran Protestantism'. While the network of specific individuals with whom Hegel studied, worked, corresponded and associated have been unproblematically identified (e.g. Friedrich Wilhelm Joseph Schelling, Friedrich Immanuel Niethammer), and while there may be some overlap between these individuals and the cultural network that came to be discursively constructed as 'German Idealism' (e.g. Schelling), identifying the specific individuals that can be identified as 'belonging' to 'German Idealism' as a general thought collective, even if there are examples of self-identification and explicit acknowledgements of influence (e.g. Samuel Taylor Coleridge), is more problematic.

However, aside from these specific and general thought collectives, one of the most powerful determinant's of Hegel's thought style was the institution of the German University itself, and I suggest that the emergence of Hegel's unique philosophy was inseparable from the emergence of a new model of this institution as he wrote and worked. In this conception, the

educational institution of the university is treated as a dynamically evolving social entity which both shapes thought styles and, in turn, is shaped by them. From the time of their founding in the fourteenth centuries, through to Hegel's time, the German Universities formed, hierarchized and directed various competing thought collectives, and at the same time were occupied, steered and reshaped by these collectives. In the European context, German philosophy was uniquely institutionalized, in other words, as a cultural practice German Philosophy was determined by the interaction that occurred between the institution of the university and specific thought collectives to a much greater extent than the types of philosophy that, for example, emerged and developed in England and France in the 17th and 18th centuries.

Immanuel Kant famously addressed the conflict between the philosophy faculty and the theology faculty in his polemic *Der Streit der Fakultäten* [The Conflict of the Faculties] (1798), which asserted the right of the philosophy faculty—then the "the lower faculty"—to exercise "the free play of reason" and "control" the higher faculties, and even went as far as to insist the philosophy faculty "must be conceived as free and subject only to laws given by reason, not by the government" (Kant 1979, 35, 43). This polemic, along with his *Religion within the Limits of Bare Reason* (1793) which brought Kant into conflict with the King's censor, Woellner, retroactively casts light on an institutional sub-text of Kant's *Critique of Pure Reason*, which in this light can be read as an act of philosophical demarcation, in the Platonic sense, but one which was performed within an institutional context: thus when Kant laid out the principles and rules of cognition and morals with his Critical Method, he was simultaneously staking out a newly claimed terrain for the philosophy faculty within the German University.

By the time that Hegel joined this conflict, and particularly when he delivered the lectures in Berlin in the 1820s, Philosophy was no longer 'the lower faculty', but been instrumental in resurrecting the conception of the university in Germany and had risen to its position of central importance (Kwiek 2006, 4-5). Thus, whereas Kant and Fichte had come into conflict with the theological faculty and had been reprimanded and penalized, in his *Introduction* to the *Lectures on the History of Philosophy* Hegel had greater freedom at his disposal to "separate" Philosophy from "other Departments of Knowledge". Though it is less explicit in terms of addressing the university power relations than Kant's *Conflict of the Faculties*, which was the last book Kant published, when he had little to lose (Gregor 1979, vii), Hegel's *Introduction* clearly engages in a departmental and disciplinary struggle, consolidating the gains made by Philosophy and reasserting its status as "the discipline of disciplines", "the sovereign and imperialist metadiscipline" (Kelley 1997, 22).

Crucially, the study of ancient Greek thought, the role that Hegel assigns Greek philosophy in the history of philosophy, and the status he assigns to Greek religion and mythology in relation to Greek philosophy, were thoroughly entangled in and determined by the departmental power struggles that had been taking place in German Universities during Hegel's lifetime. The argument put forward here is that these struggles were determining factors that contributed to Hegel choosing the word *Bildung* to describe the practice of the Athenian sophists, rather than the available alternative, *Erziehung*.

5.4 The Creuzer Affair

One clue to this disciplinary struggle can be extrapolated from Hegel's reference to "My friend Creuzer…" (Hegel 2009, 83). Georg Friedrich Creuzer (1771- 1858) was a professor of philology and ancient history at the University of Heidelberg for over fifty years, and can be identified as belonging to the network that formed Hegel's immediate thought collective, since, apart from working at the same university for a couple of years, Hegel also socialized with Creuzer and later maintained correspondence with him during his Berlin years (Pinkard 2000, 373). In 1810-12, Creuzer published his most famous book, *Symbolik und Mythologie der alten Völker, besonders der Griechen* (Symbolism and Mythology of the Ancients, particularly the Greeks), which proved to be extremely controversial, drawing fierce criticism from all quarters, in what came to be known as 'the Creuzer Affair'.

The Creuzer Affair can be situated as pivotal controversy in the history of German Philhellenism, a cultural movement of great complexity that has been the focus of much scholarly analysis following Martin Bernal's *Black Athena: The Afroasiatic Roots of Classical Civilization* (1987) and Susan L. Marchand's *Down from Olympus. Archaeology and Philhellenism in Germany, 1750-1970* (1996). The key issues will only be briefly highlighted here, insofar as they pertain to Hegel's comments on Creuzer's project.

Creuzer's *Symbolik* is treated as a key contribution to the "Oriental Renaissance" or "new Orientalism": a movement which appeared in German cultural circles towards the end of the eighteenth century (Williamson 2006, 147-154). New Orientalism opposed and radically undermined the German Philhellenism that had been established by Johann Joachim Winkelman (1717-1768) and then popularized by Friedrich Schiller (1759-1805) and the early works of Schelling (1775-1854). German Philhellenism held up Greek art, religion and republicanism as models for a renewal of public and aesthetic life in Germany, while

simultaneously downgrading or at least challenging the role of Christianity; a strategy that went hand-in-hand with a strident anti-Orientalism. However, from the 1780s onwards, the rise of Philhellenism in German universities and intellectual circles was countered by growing interest in Indian, Egyptian and Persian culture, following William Jones' Sanskrit discoveries. In contrast to earlier, dilettantish forms of Orientalism that can be traced back to the sixteenth century, the German New Orientalism wielded considerable scholarly weight, being propounded by the likes of Johann Gottfried Herder (1744-1803) and Friedrich Schlegel (1772-1829), whose works asserted "the primacy or at least the deep antiquity of Indian culture" (Williamson 2006, 150).

The publication of Creuzer's four-volume *Symbolik* in 1810-1812 (and an expanded version in 1819-21) added further weight to the new Orientalist case, since his huge scholarly erudition and rigor—typical for works claiming the status of *Wissenschaft*—simply could not be ignored. Creuzer's central argument was that Greek religion and mythology were derivative, having borrowed key aspects from Egypt, India and Persia (Stewart 2018, 34). Drawing on Herodotus' claim that the Greek Gods had Egyptian origins, Creuzer suggested that representatives of the Indian and Egyptian priestly castes had actually migrated to Greece via Thrace and transmitted their revealed religion to the indigenous population (Williamson 2006, 151); hence, in Creuzer's account, the Greek religion was adopted as a result of migration, rather than the result of seafaring Greeks importing foreign ideas. This claim enraged philhellenists, classical philologists and Romantics alike. If this was not enough, Creuzer also claimed that Judaism and Christianity had their origins in an ancient Indian monotheism. At the start of the 19th century, the suggestion that German culture, as a Christian culture, was ultimately founded on religious symbols revealed to ancient Hindus was simply unacceptable. For Johaan Heinrich Voss (1751-1826), a classicist and supporter of the Enlightenment, Creuzer's focus on ancient India was tantamount to treason, and his emphasis on eroticism and sexual imagery were scandalous (Stewart 2018, 35-36) (Williamson 2006, 152).

At the same time, another aspect of Creuzer's book infuriated German Romantics, who looked to mythology as a resource for countering the Enlightenment emphasis on Reason and Universalism. In Creuzer's reconstruction, Greek religion and mythology were depicted as impoverished derivatives of a monotheistic Indian religion. The original revelations had been communicated to the Indian priests in pure symbolic forms, but when these priests migrated to Greece "the symbols had to adjusted to the crude native polytheism and demand for stories or myths" (Creuzer 2000, 387). Creuzer thereby undermined one of the central tenets of German Romanticism, propounded by Herder and Fichte, namely the notions that there were such things

as distinct nations or peoples (*Volk*) determined and expressed by language, and that the German nation occupied a unique place among the nations. Firstly, Creuzer's account does not merely propose that Greek mythology borrowed from Oriental sources, a view that was fully compatible with German Romanticism; it actually suggests that the transmission of religion was a result migration and intermingling of races and peoples. Secondly, Creuzer's conceptual model downgrades the status of language, which was primary in the Romantic conception of *Volk*. According to Creuzer, the divine originally revealed itself in "dark, portentous symbols", and these were explicated in images and symbols:

> Such symbols or pictographs preserve the wondrous primal union of spirit and matter. Image, precedes speech, then, as symbols precede myth or narration. Or put most drastically, the symbolic or direct contemplation of spirit precedes or is higher than indirect *told* or narrated stories about the gods. Symbols directly show mystic oneness, myths portray this through human action and history; symbols teach monotheism, myths polytheism. (Creuzer 2000, 388)

Thus on this model, if the fundamental truth of monotheism is indeed symbolic and premythological, then the existence of mythology has to be conceived of as reflecting the disintegration of monotheism—an issue that Schelling grappled with for decades (Schelling 2007). Thus, rather than providing classicist scholars and Romantic poets with a source of the primordial religious truth, in Creuzer's depiction, mythology really furnishes proof of the loss of unity and the emergence of multiplicity.

Creuzer deploys the binary imagery of darkness and light to assert that "all Greek poetry draws a most decisive line between the shadowy indefiniteness of Near Eastern worship and the bright and variously formed warrior of the mythical gods". The bright mirror of Homeric poetry shows us the actions of mankind and the gods, but on the other side of this mirror there is the darkness of the forgotten; clarity emerges from forgetfulness: "What the Near East had taught and practiced, partly openly, partly esoterically, was forgotten by the Greeks amid the full clarity of their Olympus". In its Homeric form, the Greek religion embodies a shift from the "old peace and Asiatic contemplativeness" to legends focused on action and a multiplicity of actors, the deeds of heroes and gods (Creuzer 2000, 390-1).

A key component of Creuzer's historical analysis was the emphasis he placed on the relationship between religion and society. Homeric poetry is credited with unifying Greek religion for a century, but when the "old royal houses disappeared", and were succeeded by citizen lawgivers who established free constitutions, this reshaped the role of religion in society:

> This transformation of the nature of the community had great effects on the spirit of religion. The performance of devotions became one with the claims of the state, and the organization both of the holy choral dances and of the drama was at the same time a fulfillment of the duties of citizens. So tragedy and comedy, deriving anciently from the old worship of nature, now betray such a public and external spirit. (Creuzer 2000, 391)

Thus with the emergence of the state, or *polis*, religion is subjected to further fragmentation, since each state employs legends "to promote the renown of the city". On the basis of this model of disintegration, Creuzer casts the emergence of Ionian philosophy as an attempt to regain the lost unity of the original monotheism:

> Cultivated men, wearied by the confusion into which the One and the Divine had been splintered, expressed healthy doubts, complained about the innumerable and absurd myths and—distinguished by an honest spirt of enquiry—departed from the vulgarities of the mob. These were the masters of old Ionian philosophy who had grasped the harm being done to religion and philosophy by the tyranny of Homeric poetry through the entrenched power of myth. (Creuzer 2000, 391)

Creuzer's book—with its radical conception of Greek myths as polytheistic narratives that stood in a derivative relationship to a monotheistic symbolic core, as the hollow linguistic disintegration of a lost unity; with its challenge to the Philhellenic neohumanism that had emerged and prevailed in German classical scholarship from the times of Winckelmann; and with its challenge to the notion of European racial purity and supremacy and its undermining of the Romantic notion of *Volk*—was the source of such widespread intellectual outrage and unrest that the controversy broke disciplinary boundaries: aside from classical philologists like Voss, Christian August Lobeck (1781-1860) and Karl Otfried Müller (1797-1840), and philosophers such as Humboldt, Schelling and Hegel, all felt compelled to express a position on the Creuzer affair.

As Jon Stewart points out, Hegel's reference to Creuzer as "my friend", and the extent to which he acknowledged the contributions of Creuzer in other works, such as the *Lectures on the Philosophy of History* (Hegel 2011, 217-18) and his *Aesthetics. Lectures on Fine Arts* (Hegel 1975, 310-311), constitute a public declaration of Hegel's allegiance regarding 'the Creuzer Affair' (Stewart 2018, 37). Hegel was clearly influenced by Creuzer's account of religion and mythology being transmitted from society to society, and by the conception of a

primordial, unified monotheism fragmenting into multiplicity. However, it is crucial that in the *Lectures on the History of Philosophy*, Hegel also explicitly rejects a key aspect of Creuzer's thought, namely its interdisciplinary character.

Hegel refers to Creuzer in the *Introduction* to his *Lectures* when, after discussing the differences between religion and philosophy, he broaches the issue of whether mythology can be included in the history of philosophy. He writes:

> The first point concerns mythology as such, which is said to contain implicit philosophical themes [*Philosopheme*]; to that extent mythology may be considered in the history of philosophy. My friend Creuzer is renowned for his special project of treating the mythology or, in general, the religious representations, of all peoples, so as to recognize the philosophical themes or the rational element in them. (Hegel 2009, 83)

Since Hegel is explicitly engaged in disciplinary demarcation at this point, that is, in justifying his exclusion of various forms of cultural production from the history of philosophy, Creuzer's "special project" can be read as one which blurs disciplinary boundaries.

At the time when Creuzer's *Symbolik* was written, and even at the time of its second edition, philology was a somewhat amorphous discipline which would eventually emerge into the narrower disciplines such as literary criticism, textual criticism, historical studies, classical studies, Oriental studies etc. In purely methodological terms, Creuzer's project did not sit well with the historicist, text-critical approach that prevailed in north-German philology, since it drew on ideas from secular history and aesthetics, and proposed novel ideas about language that would later become the preserve of linguistics and semiotics (Marchand 1996, 45) (Stewart 2018, 36) (Williamson 2006, 153-4). So, yet one more controversial aspect of Creuzer's *Symbolik* was its interdisciplinary character.

If Hegel had accepted Creuzer's methodology and conception of human thought, it would have entailed adopting a continuous approach to mythology and philosophy, rather than a discontinuous one. In other words, the history of philosophy would have had to begin from the rational elements contained in myths, or "theomyths" to use Creuzer's terminology (Creuzer 2000, 396). Thus Hesiod's *Theogony* could have been treated as a text containing discrete but implicit philosophical elements, such as logical development and rational arguments.

However, in spite of the evident sympathy Hegel had for Creuzer's project, he simply draws the line at such disciplinary encroachment and insists that an absolute boundary must be drawn between mythology and the history of philosophy. In a typically complex strategy, Hegel

erects this boundary through attacking Creuzer's critics. While Creuzer's opponents have argued that his methodology was "unhistorical"—here Hegel probably had Voss in mind—suggesting that he had 'read into' his material, or projected rationality into ancient mythology, Hegel acknowledges Creuzer's claim that rationality is present in mythology, and at the same time praises his methodology:

> The religions of the various peoples, and their mythologies too, are products of rational human beings who have set down in mythology their highest consciousness, a consciousness of what is true. It follows in any event that mythology does contain reason, thoughts, general insights and determinations, in short, what one calls 'philosophical themes'. […] All religions, no matter how natural, simple, or childish they may seem, are products of the reason that is becoming self-conscious, however meager their religious configurations may still be. So Creuzer should be acknowledged for employing the methodology that is, in and for itself, authentic and essential. (Hegel 2009, 83-4)

Thus, since he allows that mythology and religion contain philosophical themes, Hegel has to rely on another strategy to maintain a clear disciplinary boundary and exclude mythology and religion from the domain of philosophy. Hegel's concept of choice is the distinction between thought that is implicit (because it is entangled in contingent, sensuous imagery) and thought that is explicit:

> It is not our task to deal with philosophical themes as such, that is, with general ways of representing what is true or with thoughts presented in just any fashion. Instead we deal with thoughts that are out in the open [*heraus sind*] and only to the extent that they are out in the open—only insofar as religion has attained consciousness in the form of thought [*... die Religion hat, in der Form des Gedankens zum Bewußtsein gekommen ist*]. This is a momentous distinction. Reason is present in the child too, but in the child it is merely the capacity for reason; in the history of philosophy, however, we are dealing with its form, with the fact that this content is set forth in the form of thought. Philosophical themes contained implicitly in religion are not our concern. (Hegel 2009, 84-5)

This "momentous distinction" (*ungeheurer Unterschied*) essentially entails that the history philosophy is profoundly narrowed in scope: the content of the history of Philosophy is thought which is explicitly set forth in the form of thought. This excludes thought that is contained implicitly in the form of sensuous images or representations, which in Hegel's categorization of content excludes the thought and rationality contained in religion, mythology, art and poetry.

This content is further narrowed in Hegel's delineation of the relationship between Philosophy and scientific knowledge, which excludes natural philosophy from the history of Philosophy and self-differentiates German Philosophy from English Philosophy (Hegel 2009, 73-4). Hegel's comments on the broad content covered by other 'Philosophy' in other contexts, and his contribution to the methodological controversy surrounding 'the Creuzer Affair', demonstrate that Hegel was fully conscious of other possibilities, other forms that the discipline of 'Philosophy' could take.

The demarcation that Hegel performs in order to specify an exclusive remit and domain for Philosophy is above all a *disciplinary* demarcation; a thought style asserting its position within an institution. Hegel's *Lectures on the History of Philosophy* concern Philosophy as *a university discipline*, and specifically a German university discipline that was asserting its self-differentiation in relation to other university disciplines, particularly philology or, more broadly, classical scholarship. By the 1820s, in the institutional context of the German University, both the disciplines of philosophy and philology/classical studies had managed to finally break free from the control that the theological faculty had exerted over them for centuries.

5.5 The Evolving University Institution as a Determinant of Hegelian Thought

It is necessary to consider the broader cultural context in which Hegel made his distinctions and demarcations. These were not issues with which he wrestled in isolation, and the Hegelian system, with its historical-determinist model of consciousness, recognizes this—in Hegelian terms, certain preoccupations pervaded and unified the culture of his time, because the one spirit was thinking and recognizing content through the inter-subjective consciousness of various individuals (Hegel 2009, 66-7). However, when viewed from a perspective adopted outside of Hegel's system, such as Fleck's theory, Hegel's perception of ancient Greek texts, mythology, religion and philosophy was determined by the thought collectives to which he belonged and with which he interacted. These thought collectives were shaped by—and interactively shaped—the dynamically evolving institution of the German University.

Some historical facts that are constructed in historical studies register the dramatic changes that took place in the course of two decades. In 1788, Wilhelm von Humboldt, along with his brother Alexander, transferred from the Prussian University at Frankurt-on-Oder to the University of Göttingen to study Jurisprudence. He also enrolled in the theological seminar, "not because he wished to become a pastor, but because that seminar taught the newly

fashionable classical sciences in an unparalleled way" (McClelland 1980, 112). Thus, in order to study classical philology at Göttingen with Christian Gottlieb Heyne, it was necessary to do so within the theological faculty. Furthermore, the philological seminar, pioneered by Heyne at Göttingen, was the embodiment of the neo-humanist approach to education and the university space where the concept of *Bildung*—which as the previous section showed, was crucial to Hegel's perception of Greek culture and the sophists—was put into practice (McClelland 1980, 62). A fascination with the concept of *Bildung* was an enduring feature of Humboldt's complex intellectual development and his huge contributions to educational reform, spanning his time in Jena, Paris and Rome to the founding of the University of Berlin in 1809. For Humboldt, under the influence of Schiller and Fichte, both classical studies and philosophy were crucial for self-awareness, along with the study of history and languages (Hofstetter 2001, 104). Thus, when he founded the University of Berlin, with Fichte and the theologian Friedrich Schleiemacher, which aimed to "join 'objective *Wissenschaft*' with 'subjective *Bildung*'" (Hofstetter 2001, 106), in a vision of the university as an instrument of national renewal and identity (Kwiek 2006), although philosophy was to be the 'queen of the sciences' in this institution, classical studies, was also a key element of Humboldt's vision, evidence of which can be seen in his efforts to employ Friedrich August Wolf (Hofstetter 2001, 105).

While Heyne is credited with being the first to treat the study of Greek mythology as *wissenschaftlich* (scientific) (Hofstetter 2001, 23), it is Wolf who is credited with inventing the term *Altertumswissenschaft* (classical studies, or the scientific study of antiquity) and established the first department for classical philology in the German academic world during his time at the University of Halle (1783-1807) (Stewart 2018, 227-8).

Wolf's attempt to demonstrate that philology could be conducted on a scientific basis— as *Wissenschaft*—provides a clear example of Fleck's notion that ideas can have revolutionary consequences when they are communicated across disparate thought collectives and applied in new disciplines. Wolf was inspired to adopt the methods of English natural philosophy—in particular the rigorous attention to empirical detail combined with mathematical deduction found in Newtonian physics—and to employ them in classical philology, applying them to the sources of antiquity: literary texts, inscriptions, coins—with a view to establishing the facts about ancient Greece and Rome (Bolter 1980, 86-7).

Lastly, Wolf also contributed to the Romantic concept of *Volk*. For Wolf, while natural science provides certain knowledge of nature, philology furnishes knowledge of ancient man and peoples:

> The philologist's goal is the knowledge of ancient man himself. Examining the remains of antiquity, he achieves an "organically developed" picture of the national character of the Greeks and the Romans and so learns about human nature itself: "its original powers and tendencies, and all the restrictions and limitations [which act upon them]." (Bolter 1980, 87)

The assertion that certain, scientific knowledge of human nature and nations—or *Volk*—could be deduced from ancient texts and other empirical evidence, found in Wolf's *Darstellung der Altertumswissenschaft* [A Survey of Classical Studies] of 1807, reflects the intellectual mood of German scholars and growing scholarly nationalism in the midst of the Napoleonic Wars: one year before the publication of Wolf's *Darstellung* Napoleon had defeated Prussia at the Battle of Jena and then closed Wolf's University of Halle to nip student rebellion in the bud (Hofstetter 2001, 89). By 1807, the universal humanism that had defined the French-led Enlightenment had shifted to a preoccupation with peoples, nations, and national spirit.

Thus, historical scholarship furnishes evidence that three of the concepts that exerted a critical influence on Hegel's general thought style, and in particular his perception of and approach to ancient Greek culture and philosophy, namely *Bildung*, *Wissenschaft*, and *Volk*—were forged or developed to a significant extent by the neo-humanist representatives of the discipline of classical philology/studies. While some of these representatives of philology, such as Creuzer, and of neo-humanism, such as the education reformer Immanuel Niethammer, can be identified as belonging to Hegel's immediate thought collective (conceived of as a specific network of individuals with whom he interacted and corresponded), and thus can be indisputably identified as influencing Hegel's thought style; and while Hegel publicly signalled his allegiances in the methodological and political conflicts between more broadly constructed philological thought collectives, such as between the "south-German style of Romanticism", represented by Creuzer, and the "north-German philologists" (Williamson 2006, 153-4) or "the world of specialist philology—especially in Berlin" (Marchand 1996, 45), he also represented and defined the discipline of Philosophy as a science whose form and content was distinct from that of philology. In other words, no matter how indebted the Hegelian thought style was to other thought styles and collectives, even for the intellectual labour they invested in the development of concepts that were critical for the Hegelian system, such as *Bildung*, Hegel resisted Creuzerian interdisciplinarity to assert the institutional status and role of Philosophy within the German University.

The next section will circle back to reconstruct the changing status of the philosophical faculty within the institution of the German University and its role in articulating the German Enlightenment *Aufklärung* (Enlightenment).

Chapter 6: Applying Fleck's Theory to the Rise of the Philosophical Faculty in the German University

6.1 The Founding of German Universities: Secular Endowment

According to Friedrich Paulsen's classic *The German Universities and University Study* (1885), secularization is what distinguishes the first German universities, founded in the 14th century, from their French and Italian counterparts, which had been founded in the 12th and 14th centuries. While the latter had emerged spontaneously and then acquired the status of public legal corporations, German universities were intentionally founded by territorial governments, and the local ruler granted their autonomy, rights and exemptions (Paulsen 1906, 16). Thus, Paulsen asserts that the secular endowment of German universities meant that the process of *the secularization of instruction and knowledge* really began in the late-medieval German universities (Paulsen 1906, 27).

However, In *Protestant Theology and the Making of the Modern University*, Thomas Albert Howard draws on James H. Overfield's work (1984) to explicitly question Paulsen's *secularization of education* thesis, arguing that the German universities did indeed have religious missions:

> […] all faculty members were also members of religious orders or had received some form of clerical training in monasteries or cathedral schools. University routines and rituals were, in large measure, modelled after life in the cloister. Papal bulls recognizing universities assumed that knowledge was the business of the church. It is thus most accurate to regard the earliest German universities, although no longer ecclesial in the strictest sense, as religious institutions in the broadest sense and therefore as key agents of cultural unity in the world of medieval Christendom. (Howard 2006, 50)

Hence, in Overfield and Howard's reconstructions, the fact that German universities were founded by princes and local governments would come to have significant repercussions at the time of the Reformation, when, with the emergence of territorial-confessional states, the autonomy of the universities came to be more restricted.

The issue of the secularization of knowledge is thus a complex one. If the German universities can be described as broadly religious institutions prior to the Reformation, it can be argued that they became *fundamentally* religious institutions in the 16th and 17th centuries, when the territorial-confessional states established their own universities and exerted direct control over the theological faculty, making appointments dependent on oaths of confessional

fidelity; and then, in turn, when the theological faculty tightened its grip over the other higher faculties and lower faculties, for example through the practice of censorship (*Censurrecht*) (Howard 2006, 46, 109).

If the *secularization of instruction and knowledge* is defined as the process wherein the education system (with its institutions, professoriate, teaching staff, curricula, texts etc.) are freed from the control of religious authority (in its various forms: Catholic or Protestant churches, religious leaders, the theological faculties, the ecclesiastical orthodoxy imposed by confessional states, rulers of strong religious persuasion), then the evidence suggests that secularization was not achieved in Germany until the turn of the eighteenth century, under the influence of progressive rulers. Direct evidence of secularization can be found in the statutes of the Universities of Halle (1692) and Göttingen (1734), which explicitly promoted tolerance and allowed more academic and teaching freedom (Howard 2006, 91-2, 106-9).

Nevertheless, despite these secularizing advances, when Hegel came to study at Tübingen, in 1788, and thus on the eve of the French Revolution, this university remained very much under ecclesial control. As Terry Pinkard writes:

> Universities remained semifeudal "corporations," institutions governed by the professoriate, who were far more interested in exercising their inherited medieval privileges than in anything else, and who thus tended to resist strenuously all efforts to reform the universities. Moreover, like many other German universities, Tübingen maintained an idea of its educational mission as that of passing on orthodox, correct belief to its students, a pedagogical idea reinforced by the predominance of the theological faculty of the university. (Pinkard 2000, 19)

Although Pinkard generalizes somewhat in this passage, ignoring the developments at Halle, Göttingen and—by this time—Jena, there is a consensus in the historical scholarship that these progressive institutions stood out because from the 17th century onwards the stagnation and backwardness in German universities and scholarship had become the butt of jokes in Europe and the target of attacks from German intellectuals like Leibniz, Lessing, Goethe and Schiller (Paulsen 1906, 42) (Howard 2006, 81) (McClelland 1980, 79). Furthermore, Howard's above-cited description of 14th-century university life being "modelled after life in the cloister" still held true four centuries later, when Hegel embarked on his studies in the theological faculty at Tübingen's seminary, on route to becoming a pastor:

> […] The Protestant Seminary was built on the foundations of an older Augustinian seminary, and, for the duration of their studies, the students became in effect Protestant monks. They

were required to wear long black coats (which vaguely resembled cassocks) with white cuffs and collars. The seminarians' hours were strictly regulated, and they were regularly scrutinized and watched. Failure to abide by the rules meant punishment, usually in the form of being deprived of one's ration of table wine for the day or being incarcerated in the student jail (the Karzer). (Pinkard 2000, 21)

6.2 Academic Structure and Hierarchy

In terms of structure, the German universities adopted the Parisian four-faculty model: the lower arts faculty (*facultas artium*), which would later also come to be called 'the philosophical faculty', and the three higher faculties of theology, law and medicine. Crucially, the function of the arts/philosophical faculty was to prepare students for the higher faculties, and there was a particularly close connection between the philosophical and theological faculties—with the former subservient to the latter (Howard 2006, 53-6).

The fact that the arts/philosophical faculty occupied the lowest rung of the university hierarchy was also reflected in economic terms. Government funding and church subsidies for salaries were channelled to the higher faculties, and thus to a handful of professional theologians, jurists and physicians who tended to have other sources of income anyway. The teaching staff of the arts faculty was far more numerous, consisting of a few full-time lecturers on small salaries, and students with teaching duties, all of whom had to rely on the fees they charged for extra, private tuition in order to survive (Paulsen 1906, 19-20) (Overfield 1984, 18). This situation of economic deprivation persisted after the Reformation and into the early nineteenth century: the financial prospects for would-be professional philosophers like Kant and Hegel was somewhat parlous in the early stages of their careers, when they worked as a tutor and *Privatdozent*—a private, unpaid lecturer (Paulsen 1902, 35) (Pinkard 2000, 45-52, 106).

In order to enter the theological faculty at a pre-Reformation German university, students were required to obtain a Master of Arts degree (*magister artium*). The Parisian scholastic curriculum was uniformly adopted at all German universities (Overfield 1984, 27-8), hence the bachelor's course was primarily focused on the mastery of scholastic logic, entailing the study of Aristotle's *Organon* (chiefly *Prior Analytics*, *Sophistical Refutations*, *Posterior Analytics*), while the study of grammar and Latin were of secondary importance: "To be a 'scholastic' was first and foremost to be a logician" (Overfield 1984, 44). On the master's course, students were introduced to Aristotle's other works (*Politics*, *Metaphysics*, *Economics* etc.) and Euclid's Geometry (Overfield 1984, 29-43). Thus, only after many years of studying

under the philosophy faculty could candidates finally enter the higher faculties. According to Howard, the entire curriculum entailed sixteen years of study, and a doctorate in theology was not awarded until the age of thirty-five (Howard 2006, 56-57).

Hence, on the one hand, teachers of the arts/philosophy faculty were explicitly assigned the lowest position in the university hierarchy (for example, in public processions they had to walk behind the doctors from the theology, law and medicine faculties (Overfield 1984, 26)). On the other hand, their teaching of logic and philosophical works was essential for the higher faculties, particularly the theological faculty. In real terms, this meant that "teachers of the arts were the cornerstone of the university" (Overfield 1984, 26), and at the same time constituted an exploited economic class, in terms of payment for their intellectual labour.

6.3 The First Wave of Reform: The Reformation

In Paulsen's outline, a second wave of German universities appeared in response to the Renaissance-humanistic movement (e.g. Freiburg—1460, Tübingen—1477, Wittenberg—1502) and these foundations were soon followed by far-reaching changes to curricula, such as the abandonment of scholastic Latin in favour of classical or humanistic Latin, and—most importantly for these considerations—the inclusion of the study of the ancient Greek language and literature. The first German scholars of Greek were given positions at German universities during this period, including Johann Reuchlin at Tübingen and Philip Melanchthon at Wittenberg (Paulsen 1906, 29-30).

Howard points out that the Reformation began as a university event, instigated by a professor in the theological faculty at the University of Wittenberg, and Lewis W. Spitz argues that Martin Luther's Reformation would not have triumphed without the support of the universities (Spitz 1984, 42) (cf. Howard 2006, 62). While Luther insisted that nothing could be more wicked than "unreformed universities", it was his friend, Melanchthon, who was to be tasked with designing and implementing these educational reforms. Rejecting the anti-rationalist and anti-cultural elements of the Protestant Reformation, such as Luther's abhorrence for Aristotle, Melanchthon managed to synthesize the ideas of Renaissance humanism and Lutheran evangelical theology into a coherent philosophy of education for the German states (Paulsen 1906, 32-33).

Melanchthon's allegiance to the humanist movement was made public in the inaugural address gave at Wittenberg University in 1518, entitled *On Improving the Studies of Youth* (*De corrigendis adolescentiae studiis*). In this speech, the twenty-one year old Melanchthon

recommends that "Greek letters should be added to Latin, so that reading the philosophers, theologians, historians, orators, poets, wherever you turn, you may gain the very substance, not the shadow of things [...]", and advocates reading Homer and Plato in addition to Aristotle (Melanchthon 1974). Two key elements of Renaissance Humanism are expressed here: firstly, the conviction that Greek authors had to be read in the original Greek, rather than in Latin translation, if the essence of their thought is to be grasped; and, secondly, that the study of Greek thought and writing must go beyond the narrow confines of Aristotelian scholasticism and embrace a range of 'pagan' authors and genres.

Moreover, in this oration Melanchthon also begins to give expression to an idea which in Fleck's terms could be viewed as constituting a proto-idea for the 18th century concept of *Bildung*. After stressing the importance of history for public concerns and civil activities, Melanchthon offers a broader definition of philosophy:

> With the name "philosophy" I therefore include the science of nature, the principles and examples of behavior. Whoever has been properly imbued with these has secured for himself the way to the summit. The attorney at law will have the source for preparing an oration rich in content and forceful; the statesman the source from which he may acquire formulas for the peaceful, the good, the just ... (Melanchthon 1974, 170)

Here philosophy is defined broadly, as reflection on history, nature and behavior which—crucially—has civic utility, since it can and should be applied and in the practice of law and statecraft. For Melanchthon, "renascent studies" are aimed at "cultivating good minds", but in the context of the German university—and this is where the emergent concept of *Bildung* can be detected—these good minds are prepared for service of the state.

The synthesis of Renaissance humanism and Reformation theology comes into clearer view in a later oration, entitled *On the study of languages*, given at Nuremberg in 1533, in which Melanchthon justifies the study of the Hebrew and Greek languages on University arts courses. First, Melanchthon refers to both Erasmus and Luther in short succession to emphasize that knowledge of Holy Scripture is essential for the good young men that make up the state and country, and that knowledge of languages—the cornerstone of Erasmus' humanism—is necessary for understanding the Scriptures and the will of God, and for the study of theology (Melanchthon 2012, 30-2). Second, Melanchthon insists that knowledge of Greek is crucial for understanding philosophy and Aristotle, thereby jettisoning scholastic Latin translations of 'the philosopher' (Melanchthon 2012, 33). Third, he sets the path for German classical philology

over the next three centuries, by asserting the supremacy of the Greek poets and historians over the Latin ones, due to their universal truths and practicality (Melanchthon 2012, 34). Lastly, Melanchthon stresses the importance of Greek for the knowledge of medicine and law:

> Medicine is to a large extent Greek, and cannot be grasped without philosophy. And those who dedicate themselves to the law do not only strive to acquire the rhetoric of the law-court in order to apply it to their occupation, but they also seek a teaching that will be of use to the state and, as they themselves say, a philosophy that is not feigned. In order to protect themselves with dignity they will surely also need some other kind of teaching, that is, the knowledge of religion and of antiquity, eloquence and those writings which, because they contain the sources of laws, are no less often employed for deliberations on public duties than the laws themselves. (Melanchthon 2012, 34)

A few points can be highlighted here: for Melanchthon the arts course serves a purpose within "the state", and he argues that ancient Greek and Greek philosophy should be essential components of this course. While the utility of ancient Greek and Greek philosophy for prospective theologians is clearer, since they are key to understanding Scripture and Aristotle, he also argues that these studies will benefit doctors and jurists, since they are the "source" of medicine and law. The suggestion running through the oration is that the inclusion of Hellenic studies in the arts course will prepare students for the higher faculties, and eventually for their professions, by developing the essential general knowledge and awareness necessary for public duty in the state and in the service of the Church and God. Again, the explicit connection between the general cultivation of young minds and later civic duty adds weight to the thesis that Melanchthon's nascent conception of education serving the state, when combined with a synthesis of Renaissance Humanism and Reformation theology, can be viewed as a proto-idea for the concept of *Bildung* that would emerge in the eighteenth century.

Paulsen goes as far as to assert that Melanchthon single-handedly laid the foundations for the later successes of German philosophy and science:

> It was primarily due to him that the Protestant half of Germany won the ascendency over Catholicism in the realm of education and culture. There can be no doubt whatever about the final outcome: German philosophy and science, German literature and culture grew up in the soil of Protestantism, and they may be described as the result, although perhaps remote, of that spirit of freedom and independence of thought which the Reformation called into being. (Paulsen 1906, 33)

However, this "final outcome" would not be realized until the late 18th and early 19th century. According to Howard, Renaissance humanism and the Reformation led to significant changes in the curricula of German universities, but not their structure; thus it was "an alteration in university *content* but not *form*" (Howard 2006, 60).

In the decades following Melanchthon's educational reforms, German universities and schools turned their back on the universality championed by the Renaissance, became more restrictive and inward-looking, and ultimately entered a period of decline that would last for centuries—until late in the 18th century. Among the complex cultural and political factors at work in this process, the emergence of states defined by creed and the strengthening of territorial boundaries are identified as having a fundamental impact. In a nutshell, the Reformation and Counter-Reformation entailed that the German-speaking regions became a patchwork of variegated, competing states. Numerous universities were founded in both Protestant and Catholic states, Königsberg (1544) and Jena (1556) being famous examples of the former, and Dillingen (1549) being the prime example of the latter. Paulsen describes the emergence of these 'territorial-confessional universities' as follows:

> The chief impetus leading to these numerous foundations was the accentuation of the principle of territorial sovereignty from the ecclesiastical as well as the political point of view. The consequence was that the universities began to be *instrumenta dominationis* of the government as professional schools for its ecclesiastical and secular officials. Each individual government endeavored to secure its own university in order, in the first place to make sure of wholesome instruction, which meant, of course, instruction in harmony with the confessional standards of its established church; in the second place, to retain the training of its secular officials in its own hands; and, finally, render attendance at the foreign universities unnecessary on the part of its subjects, and to keep the money in the country. (Paulsen 1906, 36)

The appearance of the princely territorial states was concomitant with the growth of bureaucracies and a demand for public servants (Spitz 1984, 48). Hence, education and the universities primarily became tools for producing both the servants (*Beamte*) essential for the running of the state—bureaucrats, jurists and judges, and the pastors and churchmen necessary for maintaining the presence and authority of the church throughout the state. While the medical faculty remained the weakest of the higher faculties, the law faculty began its steady rise in importance and prestige during this period: from this time on, the state bureaucracy would come to operate as "an independent entity, like the Church", judges and jurists would become an

increasingly privileged class, and the law faculty would open the door to the esoteric science of law (Paulsen 1906, 38-39), (cf. Bruford 1935, 236).

However, during this period of heightened religious passion and conflict following the Reformation, and then during the Counter-Reformation and the Thirty Years War, when creed was a vital matter of state identity, there was an increased need for theological expertise and justification, hence the theological faculties strengthened their grip on the universities, in both Protestant and Catholic states (with the latter supported by the Jesuit colleges). Hence the previously mentioned argument that German universities can be characterized as fundamentally religious institutions during this period. Due to the pressing need for "doctrinal purity", the theological faculties at reformed universities came to be dominated by "protestant scholasticism", a method of philological and logical analysis that would prevail in German universities well into the 18th centuries (Howard 2006, 68).

Howard suggests that following the Reformation the "subservient role of the arts faculty" actually became more pronounced:

> In fact, under medieval scholasticism, all-important logic, though nominally the servant, regularly dictated the terms of theological study. Because of the Reformation, however, the imperatives of doctrinal purity (defined for Lutherans by the Augsburg Confession of 1530) and the practical exigencies of making the Reformation a social success (through the training of committed clergymen) reinforced the notion that time spent in the philosophical faculty was a mere prelude to serious theological study. (Howard 2006, 71)

In the philosophical faculty, the study of Aristotle, in spite of the fact it might involve reading passages in Greek, was still fundamentally scholastic in approach, and was treated purely as preparation for the study of theology (Paulsen 1906, 45). The post-Reformation focus on doctrine ultimately entailed that the supposedly humanistic study of philosophical texts was subordinated to theological concerns. Steven Ozment concludes: "The humanities became for Protestant theologians what Aristotelian philosophy had been to late medieval theologians – the favored handmaiden of theology; the rhetorical arts served the more basic task of communicating true doctrine" (Ozment 1980, 315).

Despite Melanchthon's calls for the study of Greek and Hebrew, according to Bruford Latin retained its dominance: as the tool for studying the Catechism, as the *lingua franca*, and as the model of eloquence. Thus, in the state grammar schools, such as the one in Württemberg

where Hegel was educated,[66] over three centuries after Melanchthon's reforms, Latin was the medium of instruction:

> Greek if taught at all was given far less attention. The only other important subject was religious instruction. The elements of rhetoric and dialectics, arithmetic and geometry, physics and cosmogony were thrown in, all taught in the medieval way. It will be seen that there was a very great deal in the school curriculum that had remained unchanged since the Middle Ages. (Bruford 1935, 241)

Latin remained the language of instruction at all German universities until the foundation of the University of Halle (1694), which was strongly influenced by developments in France, such as the growing fashion for the use of vernacular French in court circles and the salons, which at this time were the centres of intellectual activity in France, rather than the universities.

In English and French Philosophy a decisive break had been made from scholasticism in the first half of the seventeenth century, which was associated with the use of the vernacular in philosophical writings. While Francis Bacon's relentless onslaught on scholasticism was delivered in Latin, in *Novum Organum* (1620), subsequent ground-breaking works, such as Thomas Hobbes's *Leviathan* (1651), Robert Boyle's *The Sceptical Chymist* (1661) and John Locke's *An Essay Concerning Human Understanding* (1689), were all written in English. Similarly, René Descartes employed vernacular French to deliver his personal and accessible attack on "the schools" in *Discours de la Méthode* (1637). It is of crucial importance that these innovations in philosophy took place largely outside the universities and even in opposition to them.

Due to the disastrous impact of the Thirty Years' War (1618-1648) on the German states, and the predominance of protestant scholasticism in the German universities, no equivalent break was made in German philosophy in the 17th century. Gottfried Wilhelm Leibniz cuts a rather odd figure in this regard. After obtaining his doctorate in law from the University of Altdorf in 1666, Leibniz declined a professorship (Antognazza 2009, 66), began his autodidactic scientific studies in Paris and London, gravitated towards scientific societies and court circles, treated German universities and scholarship with disdain (Howard 2006, 81), established the *Kurfürstlich Brandenburgische Sozietät der Wissenschaften* (Society of

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[66] When Leibniz began his formal education at the Leipzig Latin school in 1653, the study of Latin dominated the first three classes, amounting to twenty hours per week, and Greek was not introduced until the fourth class: "Whereas teacher and pupils were required to speak Latin within the confines of the school, instruction in such disciplines as ethics, physics, and astronomy was restricted to four hours per week during the final year" (Antognazza 2009, 31)

Sciences of the Elector of Brandenburg) in 1700 as an alternative to the universities (Paulsen 1906, 42), and wrote his philosophical works in French and Latin rather than German. Yet, it could be said that he never entirely abandoned the protestant scholasticism he imbibed in his youth: unlike Descartes, Leibniz did not abandon the rigour of Aristotelian scholasticism, and in fact his philosophy could be described as a synthesis of scholasticism with the new science that was emerging in England and France (Antognazza 2009, 37, 46-7) (Hösle 2017, 44-5). It was not until the works of Christian Wolff appeared in the eighteenth century—works written in German and later translated into Latin—that a definitive break from the scholastic philosophy was effected in German Philosophy (Paulsen 1906, 45).

6.4 The Second Wave of Reform: Halle, Göttingen and the concept of Bildung

6.4.1 The University of Halle

The University of Halle was founded in 1694 with the explicit intention of addressing the failings and widespread decline in German Universities. It grew from a practically oriented *Ritterakademie*, an alternative educational institution to universities, which prepared young men for careers in the military and the state. When Halle was established as a university, a set of factors can be identified which had significance for the philosophical faculty.

Firstly, the theological faculty was strongly influenced by Pietism rather than Protestant scholasticism, and was thus more focused on "worldly engagement" than "scholastic subtlety". This entailed that the other faculties had greater freedom to provide instruction with more practical relevance, and which would thereby meet the needs of the state and society. Consequently, the university "attracted law students from the wealthier classes from all over Germany" (McClelland 1980, 34-5). This signalled a decisive shift from the dominance of protestant scholasticism towards the more utilitarian conception of education that emerged in Prussian cameralism: the university was treated as a social machine, with its intellectual production supplying the societal need for educated bureaucrats and state functionaries.

Secondly, the Brandenburg state revoked the privileges of the medieval university in order to implement a policy of religious tolerance and prevent the kind of doctrinal controversies that had driven students away from the universities of neighbouring principalities. This policy of tolerance was expressly stipulated in the university's statutes:

> Indeed, the very first statute of the university explicitly called for the four faculties to live in harmony with one another and stipulated that no faculty attempt to suppress another. Each faculty was supposed to concern itself only with matters appropriate to it; therefore, a law professor should not venture into theology or vice versa. Yet within the individual faculties, the statutes granted more teaching freedom (Howard 2006, 92)

Thus, the power of the theological faculty was explicitly curtailed, and although the faculty retained its power of censorship, and despite the fact professors were still required to make an oath of confessional loyalty, according to Howard the theological faculty was the 'first faculty' in name only (Howard 2006, 92).

Thirdly, due to its progressive stance, the university attracted 'progressives': Christian Thomasius (1655–1728), who had been reprimanded in Leipzig for lecturing in German rather than Latin, the pietist August Hermann Francke (1663–1727), and, above all, the figurehead of the German Enlightenment—the philosopher Christian Wolff (1679–1754), who, according to Bruford, succeeded and "displaced" Melanchthon in terms of his impact on German education (Bruford 1935, 242-3).

In Paulsen's account, Wolff's work at Halle marks the definitive break from scholasticism in German philosophy and constitutes the beginning of "modern philosophy" in the German University:

> The aim of philosophical instruction up to this time had been to inculcate the scholastic Aristotelianism, primarily as a preparation for the study of theology. The new philosophy now defiantly appealed to its own reason. Wolff's *Verniinftige Gedanlien*, the general title of his German works, positively denies the dependence of philosophy upon theology. Basing himself upon the modern sciences of mathematics and physics, he declares that philosophy should seek the truth free from all assumptions, regardless of what may happen to the theologians. Similarly as in the case of theoretical philosophy, the theological basis of practical philosophy was also positively repudiated: law and morals, he declared, must be based upon a rational knowledge of human life and society (Paulsen 1906, 45).

Wolff's philosophy tested the tolerance stipulated in the university statutes to the limits, which famously came to a head in 1723, when Franke and theological faculty petitioned the King of Prussia to expel Wolff from Halle because his teachings "contradicted revealed religion". Friedrich Wilhelm I complied: Wolff was forced to leave the city and his writings were banned in Prussia and other German states (Howard 2006, 96). Wolff thereby became the first of a

series of German philosophers, followed by Kant and Fichte, who came into direct conflict with the theological faculty and suffered a penalty or reprimand as a consequence. As Howard notes, Wolff explicitly advocated on behalf of the philosophical faculty, and rejected its subordinate, propaedeutic status:

> 'The philosophical faculty,' he wrote, 'has hitherto been regarded merely as that which prepares young people for the other faculties of theology, law, and medicine. . . . [I]t is called the lower faculty and the others the higher faculties. But this prejudice must be done away with, and one must regard the philosophical faculty not merely as a lower one, but also as a higher one' (*sondern auch als eine Obere Facultät*). (Howard 2006, 122)

Wolff's eventual reinstatement at Halle by Frederick the Great in 1740 constituted a victorious battle in the philosophical faculty's ongoing struggles with the theological faculty, amounted to a victory for the German Enlightenment and the process of secularization, and would ultimately enable Kant to stake out further claims for the remit of philosophy in his *Critiques*.

However, one significant consequence of the curricular reforms made at Halle, with their emphasis on practical education and Prussian organizational efficiency, on the one hand, and the Wolffian emphasis on natural philosophy, mathematics and Reason, on the other, was that humanistic studies came to be neglected. The practical utility of law studies, statecraft, economics, modern languages and the natural sciences was evident, but this modernizing trend severely undermined the study of the classics, which had been a cornerstone of German education from the time of Melanchthon (Bruford 1935, 243). Interest in the study of ancient Greece and Greek, which was to be critical for Hegel's conception of Philosophy, only revived in the second half of the 18th century, at the University of Göttingen.

6.4.2 The University of Göttingen

Like Halle, the University of Göttingen was intentionally established with reform in mind, in 1734. According to McClellan, the curricular innovations were specifically aimed at attracting upper-class students who would pass though the law faculty, the "backbone of the university", and take up careers in the state bureaucracy and courts. A university education came to be associated with enhanced social prestige, and Göttingen combined the practical aspects of a *Ritterakademien* (courtly arts, riding, modern languages) with career-oriented university education which provided students with the specialist knowledge necessary to fulfil the

functions of a civil servant (*Beamte*). Thus some of the subjects that were taught within the philosophical faculty, such as history and modern languages, came to have clear practical utility for careers in diplomacy, for example, and this was reflected in the salaries of the professors taught these subjects (McClelland 1980, 38-59).

Gerlach Adolph von Münchausen (1688-1770), the founder and curator of the university, insisted that the theological faculty should "play a quiet role" at Göttingen and appointed "doctrinally neutral professors of theology" (McClelland 1980, 39). As in the case of Halle, tolerance and a progressive approach were explicitly provided for in the university statutes. And, as at Halle, this curtailment of the theological faculty's historic privileges was counterbalanced by a rise in the status of the philosophical faculty. This entailed that new subjects were introduced into the faculty's sphere, such as "empirical psychology, natural law, politics, modern physics, mathematics, modern history, geography, diplomacy and modern languages" (Howard 2006, 115-6). Then, crucially, three areas that 'belonged' to the philosophical faculty were subject to curricular innovation: history, classical philology, and classical studies (or the study of antiquity, which was to become *Altertumwissenschaft*): "At Göttingen, these subjects began a metamorphosis, whereby they ceased to be minor, subordinate (and often neglected) fields of study and began to take shape as autonomous 'disciplines' in their own right" (Howard 2006, 116). The development of these disciplines at Göttingen influenced the unique shape that German philosophy would take in the nineteenth century and determined its focus: the preoccupation with history of philosophy, the textual analysis of philosophical concepts, and the focus on ancient Greece (rather than Rome, which was more typical of French and English scholarship).

Furthermore, as was mentioned, the discipline of classical philology at Göttingen was a source of the neo-humanist approach to education and contributed to the concept of *Bildung*. The key classical philologists—who, it is worth stressing, were members of the philosophical faculty—were Johann Matthias Gesner (1691–1761) and Christian Gottlob Heyne (1729–1812). Gesner downgraded the role of grammar in classical education and recommended that students should immerse themselves in reading the classics, in order to absorb "broad intellectual nourishment from the aesthetic, moral, and cultural sensibilities present in Greek and Roman literature" (Howard 2006, 118). Heyne placed the emphasis on culture: classical texts should be treated as sources of information and insight concerning aspects of ancient culture, such as religion and civic life, which provide models for reflection and personal development (Howard 2006, 118-9). Hence the study of the classics became viewed as an essential component of a man's education: to be 'cultivated' meant to have absorbed classical

culture internally, into one's character and subjective worldview (Bruford 1935, 245). This constituted a decisive shift from Melanchthon's conception of the role of classical learning in education: while Melanchthon had defined knowledge of ancient Greek and classics as useful for the state, since this knowledge would aid jurists and physicians in the objective performance of their duties; classical studies at Göttingen emphasized the subjective, internal element of *Bildung* (McClelland 1980, 60). Nonetheless, this emphasis on *Bildung* as character development was not without its practical utility: the student community at German Universities in the 17th and 18th was notorious for its drunkenness and brawling (Paulsen 1906, 42) (Howard 2006, 47), hence the cultivation of character leading to the improvement of students' behaviour could have immediate consequences.

This concept of *Bildung* developed by this specific university thought collective spread far beyond the confines of the university and into the general culture, especially as it became allied with the literary Hellenism propagated by writers such as Goethe. From 1750 to 1810, due in large part to Heyne's receptivity to new ideas, there was a great deal of cross-fertilization between Göttingen and independent classical scholars such as Herder and Winckelmann, and Göttingen exerted an influence on the University of Jena in Goethe's Weimar, and on Humboldt and Wolf who would go on to found or work at the University of Berlin (Howard 2006, 119). In its emphasis on the subjective side of education and the concept of *Bildung*, the thought style of classical philology can be seen to be aligning with other emergent thought styles, such as that expressed in Rousseau's *Émile, ou De l'éducation* (1762), which was a huge influence on Kant's moral philosophy, and which led to the development of a new, Romantic philosophy of education.

These convergent trends could possibly be described as constituting a Kuhnian *paradigm shift* in attitudes towards education. However, this goes against the original sense in which Kuhn used this concept when describing scientific revolutions, that is, where a paradigm is conceived as a model used to account for phenomena, and a paradigm shift is defined as occurring when an increasing number of observed anomalies make the paradigm untenable, and a new model is proposed to account for the phenomena (Kuhn 1962, 65). With cultural phenomena, such as the emergence of specific concepts within a specific institutional-cultural context, Kuhn's concept of a paradigm shift is simply inadequate, not fit for purpose. If Melanchthon's Humanistic-Reformed model of education is treated as a paradigm, which was followed (and to some extent supplanted) by the Classicist-*Bildung* model of education, then what were the observed anomalies which led to dissatisfaction with the Humanistic-Reformed model? Dissatisfaction with the social and cultural outcomes of a certain philosophy of

education cannot be adequately captured by applying Kuhn's concept of anomaly to the cultural developments and social context. Kuhn's concept of paradigm is fundamentally that of a model which determines perception; it is the inherited or adopted model that defines *what* can be perceived and conceptualized.

Melanchthon's Humanistic-Reformed model was a normative program that assigned a value to classical texts and a purpose to their study, and thus indicated *how classical texts should be perceived and valued*. The Classicist-*Bildung* model enriched Melanchthon's model by assigning a value to the individual's *experience* of classical texts, and thus indicated *that the perceptions and experiences of the individual should be assigned a value within society*. This shift can only be accounted for through the consideration of numerous factors, including the process of secularization and the weakening of Christian values, the growth of state power, economic upheaval and changing class structure, and developments in the institution of the university.

Fleck's theory of thought collectives and thought styles is more able to account for the shift from the Humanistic-Reformed model to the Classicist-*Bildung* model. These models can be treated as the cultural products of specific groups of people, or networks, operating in a specific institutional context. The ideas and concepts of such networks changed in the process of communication between networks and disciplines, and in response to the determining factors such as those mentioned above. Thus the innovation introduced with the concept of *Bildung* can be viewed as determined by numerous factors operating in a complex communication process.

A case in point, is a tension or conflict that can be identified as emerging at Göttingen. On the one hand, it was practically oriented institution which catered to the needs of the state and society, yet, on the other, this function and approach was scorned as utilitarian—as a focus on careerism or *Brotstudium*—by the leading representatives of classical philology and Hellenism. A class element can be highlighted in this regard: according to McClelland, while the law faculty attracted upper-class students and the nobility, the neo-humanistic seminars of classical philology

> appealed to young men from the poorer sectors of society. In the midst of social betters trained principally in courtly arts and law, these students gained a new respect for their own fields of study and a heightened prestige as contributors to a reinterpretation of the classical and biblical worlds. They could begin to look askance at the richer and more aristocratic law

students for the mundanity and shallowness of their man-of-the-world training (McClelland 1980, 60-1).

This class aspect was also emphasized by both Paulsen and Bruford in their characterization of the unique aspects of German philosophers. Thus according to Paulsen, they tended to be from lower-middle class or middle class backgrounds (Kant's father was a harness maker, Fichte's – a ribbon weaver, Schlegel's – a pastor) and this entailed that, in contrast to the French and English philosophers, like Voltaire, Locke and Hume, who moved in aristocratic or gentlemanly circles, German philosophers were first and foremost university professors, reclusive scholars rather than sociable raconteurs. They grew up in deeply pious families, and the value placed on hard-working seriousness remained with them throughout their lives . This point is echoed by Bruford, who emphasizes that in contrast to German law professors and jurists, who tended to be recruited from the nobility, arts professors came from the lower classes of society:

> As study in the philosophical faculty had a preparatory character, the arts professors did not enjoy the same standing as the rest. They were glorified schoolmasters, who taught the elements of a fairly wide range of subjects for about as many hours a week as a schoolmaster teaches today. Being overworked and poor, and having had few opportunities of mixing in society, scholars usually lived the life of recluses. (Bruford 1935, 250)

All the historical reconstructions suggest that the philosophical faculties at Halle and Göttingen developed the concept of *Bildung*, through the disciplines of classical philology and classical studies, in opposition to the cameralist conception of education supported by the upper classes and nobility. So, in terms of Fleck's theory, these philosophical faculties constituted a broad thought collective that was divided into smaller thought collectives determined by disciplinary demarcation. The concept of *Bildung*, as developed by the classicists, contained class-determined elements that were constructed in opposition to the careerist values espoused by the upper-class or aristocratic thought collective that populated the law faculty, which was assigned the greatest value by the state, in the form of social prestige (cultural capital). Thus the concept of *Bildung*, as the product of a specific thought style, registers a class struggle occurring within the university institution, an ongoing conflict involving competing visions of the university, the role of education, and of the state.

That Hegel viewed *Bildung* in this light was suggested in Chapter 4. Pinkard emphasizes the class aspect of the concept of *Bildung* throughout his intellectual biography of Hegel. For

example, Hegel's resentment at having to work as a tutor for the ruling class von Steiger family is channelled through this concept:

> To be a person of *Bildung* had nothing to do with one's birth but with how one directed and formed oneself; men (and women) of *Bildung* thus had a claim to status that directly contradicted the traditional claims of birth and estate. […] For Hegel, the son of a ducal functionary, whose family were people of note (if not "notables") in Württemberg, who was an educated-cultivated man, who had *Bildung*, to be treated as a lowly servant by a family that in his eyes represented a dying and corrupt social order with no right to be at the center of things - all this was destined not to sit particularly well with him (Pinkard 2000, 50-1).

On this reading, the rise of the philosophical faculty within the institution of the German University was concurrent with the emergence of a new professional class in German society: a general but distinct thought collective whose thought style was shaped by, among other things, institutional developments, societal demands, the intellectual unrest accompanying revolutionary ferment, and the transmission of ideas across disciplines and national boundaries.

6.5 Approaching Kant's *The Conflict of the Faculties*

For many reasons, Kant's *Der Streit der Fakultäten*, published in 1798, is a key polemical text in the historical development of the German universities; it is also a text that retroactively sheds light on many aspects of Kant's thought and other writings.

First, in this collection of essays Kant explicitly focuses on distinct social groups and networks, defining—and making assertions with regard to—their positions and functions within the university institution, the state, and society as a whole. Thus, purely in terms of the relevance to this thesis, it is here that Kant most clearly and extensively turns his attention to what from the perspective of Fleck's theory can be classed as thought collectives and thought styles. More broadly, Kant's explicit focus on the university as a social institution, and his attempt to stake out a new role and functions for the philosophy faculty was critical for the emergence of the Humboldtian Berlin University (Mittelstraß 2005). Furthermore, the self-reflexivity involved in a state-employed philosopher considering the role of the university faculties within the state, and the role of the university within society, paved the way for the extensive consideration given to institutions and inter-subjective thought in Hegel's writing.

Second, in his attempt to demarcate the legitimate sphere of the philosophy faculty's investigations, and to adjudicate on which claims and conflicts of the faculties are legal, Kant's

essays in *The Conflict of the Faculties* shed light on the implicitly political-institutional nature of his three *Critiques*, and thus retroactively reveal how deeply his critical project had been embedded in and determined by the social, cultural and institutional conflicts associated with the German *Aufklärung* prior to the French Revolution (and, in the case of the *Critique of Judgement*, also during this tumultuous event).

Third, as Hannah Arendt highlighted, Kant's later writings, which signal new preoccupations with "constitutional and institutional questions" (Arendt 1992, 15) register the shockwaves emanating from France. While the first essay of *The Conflict of the Faculties*—written in 1794, when the French Revolution was in the midst of The Terror—was primarily concerned with the institution of the university and freeing the philosophy faculty from the control of the theology faculty; the second essay, while ostensibly focused on the conflict between the law and philosophy faculties, obliquely addresses the French Revolution ("an event of Our Time", "this event", and explicitly argues that a nation has the right to provide itself with "a republican constitution" (Kant 1979, 153). Then, *Toward Perpetual Peace* (1795) was focused on constitutional law. As John Christian Laursen convincingly argued in 'The Subversive Kant' (1986), *The Conflict of the Faculties* connects back to Kant's polemical texts written before the outbreak of the French Revolution, such as *An Answer to the Question: What is Enlightenment?* (1784), and reveals the subtle adjustments Kant made to his conception of "the public" and the scholarly community in response to the events in France and the changing atmosphere in Prussia.

In terms of Fleck's theory, Kant's live commentary on the conflicts taking place between the thought collectives of his time registers the social upheaval and intellectual unrest that both shaped emergent thought styles and were exacerbated by them. These conflicts range from power struggles between specific groups of individuals to the clashes between increasingly general formations, encompassing the philosophy faculty, the community of scholars, the German reading public, the nation, the European reading public, and even the network of European states.

The writing of Kant's *Conflict of the Faculties* was embroiled in conflict with the Prussian government. The first essay, *The Conflict of the Philosophy Faculty with the Theology Faculty* was initially written in response to Kant's reprimand from the King's censor, Johann Christoph von Wöllner, delivered in 1794, for the publication of *Religion within the Bounds of Mere Reason* in 1793. In order to get at the heart of this conflict, it is necessary to briefly consider the controversial nature of this earlier work.

6.5.1 *Religion within the Bounds of Mere Reason* (1793)

In this book, Kant essentially subordinated revealed religion to rational religion. Kant's hierarchical schema sets up an opposition between, on the one hand, "purely rational religion/faith" and "purely moral laws", and on the other "historical/ecclesiastical faith" and "statutory laws" (Kant 1998, 112-4). In this conception, purely rational religion is universal: there is only one religion, and all human beings have access to its purely moral laws—and thus, through them, to the will of God—by means of their individual consciousness and use of reason. Consequently, Kant asserts that revealed religion is not strictly necessary in itself, or at least would not be necessary were it not for the "weakness of human nature" (113). Since human cognition is impotent when it comes to *knowing* the supersensible realm, human beings have to rely on faith, but purely rational faith lacks the persuasive power necessary to assuage human nature: people are not convinced that merely fulfilling their duties towards other human beings is sufficient for God, and they come to believe that they must perform *service* for God. The devaluation of the intrinsic worth of actions in favour of the extrinsic demonstration of service entails that actions are "performed for God to please him through passive obedience". The political overtones and ramifications of Kant's schema are unmistakable:

> Since every great lord of this world has a special need of being *honored* by his subjects, and of being *praised* by signs of submissiveness; nor can he expect, without this, as much compliance with his orders from his subjects as he needs to rule over them effectively and, in addition, however reasonable a human being may be, he always finds an immediate pleasure in attestations of honor: so we treat duty, to the extent that it is equally God's command, as the transaction of an *affair* of God, not of humans; and thus arises the concept of a religion of divine service instead of the concept of a purely moral religion. (Kant 1998, 113)

Hence, rather than using reason to access purely moral laws and thereby fulfil their duties to each other, human beings extend their need to serve and obey—from human rulers to God. In a purely rational faith, reason would recognize that the divine will requires obedience to purely moral laws, but revealed faith requires human beings to honour God through the obedience to divine statutory laws, "laws which let us recognize them as obligatory, not of themselves, but only inasmuch as they are the revealed will of God" (Kant 1998, 114).

The key and most contentious consequence of this distinction between rational and revealed religion is that the latter is, by definition, contingent: a revealed religion cannot reach all human beings, and "hence does not bind all human beings universally" (Kant 1998, 114).

Its status as contingent and historical—i.e. empirical—entails that revealed or *ecclesiastical* religion is, in principle, subject to change and possible improvement, and its observances and professions of faith are, for Kant, "morally indifferent". A revealed religion can preserve its faith and statutory laws in a community through tradition and the institution of a church, but it will command the greatest respect through scripture. The fact that Christianity contains "the purest moral doctrine of religion" in its holy book is "fortunate"—a matter of luck rather than necessity (Kant 1998, 116).

The contingent (historical, empirical) nature of revealed religion entails that ecclesiastical faith can "transition" to pure religious faith. Hence Kant's conceptual schema positions ecclesiastical faith as a mere "vehicle" which should ultimately be abandoned: "as the faith of a church, it carries a principle for continually coming closer to a pure religious faith until finally we can dispense of that vehicle" (Kant 1998, 122). Kant's teleological leanings lead him to suggest that, despite current diversity, any ecclesiastical faith "tending to its goal of pure religious faith" can flower into the "all-unifying church triumphant" (122) .

That Kant's position has significant political implications becomes abundantly clear in the second part of the book, where he addresses "the counterfeit service of God", and in particular when he turns his attention to "priestcraft [*Pfaffenthum*] as a regime" in §3. Here, Kant recasts the opposition between the revealed faith and rational faith through the deployment of sets of binary pairs: coerced observance vs. free homage; the yoke of statutory law vs. the moral law; statutory commands vs. the principles of morality; and counterfeit service/*fetish-service* [*ein Fetischdienst*] vs. true *enlightenment [die wahre Aufklärung]* (Kant 1998, 173-4) (emphasis in the original). Kant's text reaches a particularly sensitive moment when he turns to the practical impact of the clergy on the state and minds of its subjects. In effect, if a church is dominated by fetish-service which demands outward professions of faith and obedience, "the masses are ruled and robbed of their moral freedom":

> Where articles of faith are included in the constitutional law, a *clergy* rules which believes that it can actually dispense with reason, and ultimately with scriptural scholarship itself, because, since it is the single authoritative guardian and interpreter of the will of the invisible lawgiver, it has the exclusive authority to administer the prescriptions of faith; hence, thus equipped with this absolute power, it need not convince but *only give orders. -* Now, since apart from this clergy all that is left is the *laity* (the head of the political commonwealth not excepted), the church finally rules the state, not indeed through force, but through influence over minds, and also, in addition, through pretense of the benefit which the state could

allegedly derive from the unconditional obedience to which a spiritual discipline has habituated the very *thinking* of the people. (Kant 1998, 174)

In this passage, Kant has moved beyond the critique of reason (and the various cognitive faculties), and beyond a critique of religion (in its revealed and rational forms), to a critique of the church as a social institution within the state.

Kant depicts a situation in which the church has suppressed both philosophy (reason – *der Vernunft*) and theology (scriptural scholarship – *Schriftgelehrsamkeit*) to seize absolute power and rule the state. This state of affairs is achieved not through force or physical coercion but through mind control. In Fleckian terms, a specific thought collective, the clergy (*Clerus*), comes to dominate by means of its thought style, priestcraft (*Pfaffenthum*). In a discursive framing, the discourse of the clergy, based on articles and prescriptions of faith, attains hegemony over other discourses (scholarly philosophy, scriptural studies) and enables a discursive formation to exercise control over society.

In *Religion*, Kant was careful not to refer to Prussian or German churches directly, or to the Prussian state: apart from scant references to the Lutheran faith (116), the Connecticut Puritans (171), and the Protestants, who are said to have attained a slight beginning in freedom of thought (181), his depictions of 'the church' remain on the general and abstract level. However, given the overtly political nature of his analysis of the function of the church in society, even it takes the form of an abstract representation, it is not surprising that the book received a reprimand from the state authorities, which had become decidedly 'counter-revolutionary' in 1788.

6.5.2 The *Edict Concerning Religion* of 1788 and the censoring of Kant – conflicting perspectives

An excerpt from the Prussian *Edict Concerning Religion* issued by Woellner, the Minister of Justice, on July 9, 1788:

> We have noted with regret . . . that many Protestant pastors allow themselves unbridled liberty in the treatment of the dogma of their confession; they repudiate several essential parts and basic truths of the Protestant Church and indeed of the Christian religion; and they preach in a frivolous manner completely incompatible with the spirit of true Christian piety, and calculated to shake the foundations of the faith of their Christian flock. They are not

ashamed to warm up the miserable, long refuted errors of the Socinians, deists, naturalists and other sectarians, and to spread them among the people with impertinent impudence under the much abused banner of *Aufklarung*! They denigrate the respect in which the Bible has been hitherto held as the revealed word of God, and do not hesitate to falsify, twist or even repudiate this divine guarantee of the welfare of the human race. (Epstein 1966, 143)

The royal proclamation of 1794, addressed to Kant:

First, our gracious greetings, worthy, most learned, dear and loyal subject! Our most high person has long observed with great displeasure how you misuse your philosophy to distort and disparage many of the cardinal and basic teachings of the Holy Scriptures and of Christianity; how you have done this particularly in your book *Religion within the Limits of Mere Reason*, as well as in other shorter treatises. We expected better things of you, as you yourself must realize how irresponsibly you have acted against your duty as a teacher of youth and against our paternal purpose, which you know very well. We demand that you give at once a most conscientious account of yourself, and expect that in the future, to avoid our highest disfavor, you will be guilty of no such fault, but rather, in keeping with your duty, apply your authority and your talents to the progressive realization of our paternal purpose. Failing this, you must expect unpleasant measures for your continuing obstinacy.

With our favorable regards.

Berlin, 1 October 1794

By special, most gracious order of His Majesty

Woellner

(Kant 1979, 11)

There are two ways of looking at the circumstances surrounding this *Edict* and proclamation. The first, which can be identified as the predominant scholarly consensus, constructed a simplistic narrative based on "the classic Enlightenment/Counter-Enlightenment dichotomy" (Sauter 2009, 7). This is a familiar good guys/bad guys story, where Frederick the Great, Baron von Zedlitz and Kant are the good guys, on the side of the Enlightenment, freedom of thought, liberalism and progress, and Frederick William II and Johann Christoph Woellner lead the bad guys, on the side of the Counter-Enlightenment, orthodoxy, obscurantism and conservatism. This classic dichotomy was outlined in Paulsen's 1902 intellectual biography *Immanuel Kant, his Life and Doctrine*:

The successor of Frederick the Great had appointed in Zedlitz's place a priestly-minded enthusiast, the former preacher Wöllner, with whom he was connected by a Rosicrucian mysticism and a common hatred of the illumination. With the religious edict of July 9, 1788, there began the systematic uprooting of the illumination in Prussia. By means of the censorship and inquisition, by removals and punishments, Frederick William II and Wöllner undertook to destroy the spirit of their predecessor, a regular regime of priestly resentment. (Paulsen 1902, 48)

This narrative was consolidated by Paul Schwartz's 1925 *Der erste Kulturkampf in Preußen um Kirche und Schule: (1788 - 1798)* (The First Culture Struggle in Prussia Regarding Church and Education), which, by associating Woellner's *Edict* with Bismarck's persecution of the Catholic Church, projected contemporary concerns back into the 18th century (Sauter 2009, 5-6). This framing was perpetuated in Mary J. Gregor's *Introduction* to her translation of Kant's *Conflict*, where Frederick William II ("orthodox and mystically inclined") and Woellner are said to have "launched a campaign to 'stamp out the Enlightenment'" (Gregor 1979, ix).

The second, alternative perspective—found in works such as Klaus Epstein's *The Genesis of German Conservatism* (1966), the essays by Joachim Whaley and T.C.W. Blanning in *The Enlightenment in National Context* (1981), the essays by James Schmidt and John Christian Laursen contained in the collection *What is Enlightenment?* (1996), and Michael J. Sauter's *Visions of the Enlightenment* (2009)—is articulated in scholarship that conducted sensitive analyses of the extremely complex cultural context, and that attempted to get beyond inherited categories. Epstein focused on aspects that distinguished the German *Aufklärung* from the Western (Anglo-French) Enlightenment, particularly the former's overriding concern with religion, and on the unique characteristics of the competing social groups that staked out conflicting positions with regard to the *Aufklärung* and progressive ideas (1966, 29-84). Sauter reconstructed the intellectual background of late 18th century Prussia to argue that the German *Aufklärung* was fundamentally a tussle over freedom and social control, between "two complicated and dynamic entities—the state and the educated elite—both of which feared uprisings by the common folk" (2009, 9). Thus, in Sauter's reconstruction, Woellner was a product of the German/Prussian *Aufklärung*, a representative of a certain current which sought to protect the state and the public sphere from dangerous social practices, such as criticism and preaching that could lead to popular uprisings.

The first dichotomous reconstruction of the *Edict* and royal proclamation would point to the existence of two distinct but general thought collectives or discourses: Enlightenment vs. Counter-Enlightenment, which could be elaborated with further binary oppositions, such as

liberal vs. conservative, secular philosophy vs. orthodox religion, the bourgeoisie vs. the first and second estates, the state vs. the public sphere etc. This approach either neglects the complex cultural context in which Kant and Woellner's texts appeared, or tends to simply this context in order to squeeze it into a set of inherited binaries that perpetuate an entrenched narrative about 'the Enlightenment'.

In contrast, the second framing positions Woellner and Kant within the same intellectual milieu, namely the Prussian state-employed educated elite, hence the conflict between them can be construed as a struggle between two thought styles that had emerged within this thought collective. Or, if we switch to the framing of discourse analysis, Woellner and Kant articulated the positions of rival discourses articulated from within the same (state-institutional) discursive formation, and their conflict was a struggle for discursive hegemony within the formation.

6.5.3 Perspectives on the German Aufklärung

Klaus Epstein (1966) highlighted four key features that distinguish the German *Aufklärung* from the Anglo-French Enlightenment: 1) a weak bourgeoisie, due to economic backwardness; 2) monarchical-authoritarian patterns of government and a corresponding low level of civic consciousness; 3) the high prestige of the universities, which meant intellectual movements tended to be scholarly; and 4) the national preoccupation with religious controversy (1966, 33). These four factors determined the public sphere, such that while the authors of the English and French Enlightenment could address an established or emergent bourgeois reading public, German authors addressed "university professors, progressive bureaucrats, marginal intellectuals, and a *bourgeoisie* which was half-embryonic and half-decadent" (1966, 33).

Therefore, while the Anglo-French Enlightenment was mainly disseminated outside of the universities, which had declined in influence in England and France, the German *Aufklärung* was primarily a university phenomenon; an academic, "professorial *Aufklärung*". This entailed that the writers of the *Aufklärung* tended to be invested in maintaining the *status quo*; they were moderate rather than radical, and their debates were conducted out of earshot of the lower classes, the despised "mob" (Epstein 1966, 34).[67]

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[67] The primarily scholarly nature of the *Aufklärung* was also emphasized by Notker Hammerstein and T.C.W. Blanning (1981) .

Then, while England had long since processed the conflict between Christianity and Deism or natural religion at the end of the 17th century, and France had absorbed Voltaire's anti-clerical attacks in the 1720s, along with his Deism, the writers associated with the German *Aufklärung*—Lessing, Nicolai and Mendelssohn—were still preoccupied with religious issues in the 1770s and 1780s (Epstein 1966, 34). The very fact that Whaley could write an essay focused on 'The Protestant Enlightenment in Germany', and Blanning on 'The Enlightenment in Catholic Germany', whereas other essays in *The Enlightenment in National Context* simply focused on The Enlightenment in England/France/the Netherlands/Sweden etc. is indicative of the extent to which the German *Aufklärung* was uniquely bound up with religious issues and confessional identities even in the second half of the 18th century. Of course, the distinction between a Protestant and Catholic Enlightenments in the German principalities also reflects cultural, political and geographical divides, which are broadly signalled in the designations 'the Catholic south' and 'the Protestant north'

Epstein also cast light on the unique features of German society in the late 18th century. Since in his approach the fundamental distinction is between progressive ideas and conservatism (defined as resistance to progressive ideas, as seeking to maintain the *status quo*), he identifies "progressive groups", "ambivalent groups", and "conservative groups", while acknowledging that this "general categorization is subject to many individual exceptions" (1966, 47-48).

The progressive groups included the entrepreneurial class, the emerging proletariat, and the intelligentsia. These groups were weak, due to, among other things, the fundamentally agrarian nature of German society, widespread illiteracy, exclusion and precarity. In this account, the intelligentsia consisted of embittered university-educated men ("literary vagabonds") who had failed to gain secure employment in the bureaucracy, clergy or universities, and impoverished students (the "academic proletariat") who hoped to transition to such positions. These sub-groups are identified as one of the main sources of the "flood of books, pamphlets, magazines, and fly sheets which propagated the cause of *Aufklärung*" (Epstein 1966, 48-52).

The ambivalent groups consisted of university professors, bureaucrats, professionals, and clergymen, in other words men who had passed through the German universities and managed to secure employment. Epstein classed them as ambivalent because, while their worldview had been shaped by the currents of the university-driven *Aufklärung,* at the same time their attitudes were kept in check by the authoritarian and paternalist tendencies that permeated the bureaucracy and state institutions. So, on the one hand, this group had been

exposed to progressive ideas in the Wolffian philosophy faculties, to the neohumanism spreading from Göttingen, to the concepts of natural law in many law faculties, and possibly to professors who espoused forms of liberal theology; they were aware of currents in French in English thought, such as *laissez-faire* political economy; they were often socially and geographically mobile; and many bureaucrats were motivated to enter the state machinery by the ideas of progress, service and legal equality they had been inculcated with at university. On the other hand, the emphasis was on "*good* government", rather than "*self*-government", and the fierce competition for positions entailed that often, once employment was secured, a conservative outlook was adopted: state functionaries had a vested interest in preserving the *status quo*. Epstein stresses that it is extremely difficult to generalize about this "ambivalent group": doctors and lawyers tended to have leisure time and were largely autonomous, hence they were free to espouse progressive ideas, but they were also embedded within communities and served conservative clients. Similarly, there was a great deal of diversity within the clergy: Protestant clergy tended to be more pro-Enlightenment than their Catholic counterparts, at least until the late 1780s, but stratification within the clergy makes generalization impossible. The higher clergy might have entertained advanced theological ideas but rejected all social radicalism, whereas the lower clergy and village pastors might have lacked intellectual sophistication, been frustrated and bitter as a result of their status, while resisting radical ideas because they needed to maintain their status above that of the peasanty (Epstein 1966, 52-58).

As was pointed out in the Introduction, this ambivalent attitude towards the *Aufklärung* was exemplified by the *Berliner Mittwochsgesellschaft*, a semi-secret debating society, active from 1783-98, whose mouthpiece magazine, *Berlinische Monatsschrift* (1783-1796), published Kant's *Beantwortung der Frage: Was ist Aufklärung?* in 1784. Eckhart Hellmuth's account of the society highlights that the majority of the society's members were officials employed in the state bureaucracy, who espoused an elitist-paternalistic attitude to "the masses" and enlightenment: the intellectual freedom that was an essential component of the *Aufklärung* was generally viewed as a privilege of the educated elite, something to be withheld and jealously guarded from the uneducated masses who were incapable of enlightenment. At the same, the society counted independent thinkers amongst its members—most notably Moses Mendelssohn and Friedrich Nicolai—who espoused a more optimistic stance on the people's capacity for self-determination and enlightenment. These fundamental differences in attitude led to splits in the society over pressing social issues of the day, such as censorship of the press (Hellmuth 1998). The debates conducted at the society and in the pages of the *Berlinische Monatsschrift*

magazine support Epstein's claim that some groups were characterized by a deep-seated ambivalence to aspects of the *Aufklärung*.

The conservative groups included the princes and their courts, the aristocracy and officer corps, the guild masters, and the peasantry (Epstein 1966, 58-59). Epstein's crucial insight at this point is that a conservative outlook, i.e., one oriented towards preserving the *status quo*, did not necessarily rule out supporting some elements of the *Aufklärung*. For example, princes were able to legitimize their rule by claiming to represent a position of "enlightened absolutism". Thus, they could embrace reason, science, and the notion of progress, as long as this was to the benefit of their autocratic rule, but they stood on shakier ground with those elements of the *Aufklärung*, such as the doctrine of natural law, that ultimately undermined their inherited positions (Epstein 1966, 61).

In Karin Friedrich's account (2012), the Wolffian Enlightenment dovetailed with Frederick II's claim to enlightened absolutism: in a rational universe designed by perfect intellect, the most legitimate ruler would be a rational law-giver, a philosopher king who had himself submitted to reason, as "first servant of the state". As Friedrich points out, the formula of enlightened absolutism encapsulated the contradictions inherent to the German *Aufklärung*, since it combined "the Enlightenment precept of individual emancipation from the bondage of tradition and ignorance with the demand for subjection to a ruler whose priority was above all to consolidate the power and efficiency of his state" (2012, 95). Thus, on the one hand Frederick II's autocratic reign saw both the publication of Kant's *Critique of Pure Reason* and the introduction of the Prussian General Law Code, and on the other was responsible for unprecedented warmongering, the Partition of Poland, and the exclusion of Prussian Jews and Polish Catholics from Frederician toleration (Friedrich 2012, 101-113).

While some enlightenment ideas were thus variously promoted, adopted or tolerated by a broad range of groups with different orientations to the *status quo*, some of the core principles of the *Aufklärung* were resolutely opposed by certain groups with conservative outlooks: Junker officers, whose worldviews were grounded in discipline, hierarchy and particularism; the urban patriciate, whose families monopolized government functions; and guild masters, who were opposed to the new entrepreneurial class. The peasantry was not so much opposed to the Enlightenment as unaware of it, being steeped in traditionalism, acquiescence, and illiteracy (Epstein 1966, 60-64).

At least until the 1760s, the German *Aufklärung* is not identified in the literature as a distinct ideology that was articulated by a specific social class. The Enlightenment was transmitted predominantly from English and French intellectual circles, as a set of ideas,

attitudes and discursive practices that were received, reshaped and retransmitted through the German states via the universities. Whaley emphasizes that Enlightenment ideas were partially absorbed into the utilitarian educational reforms that had already begun at Halle (1694) and Göttingen (1734) (Whaley 1981, 109-117). The cameralist philosophy, which prioritized vocational training and preparing young men for service in the bureaucracies and armies of the German states, could be characterized as a 'progressive' movement, when compared with the university curricula dominated by Protestant confessionalism and Jesuit scholasticism. Thus, enlightenment notions of reason and progress were incorporated into a pre-existing but developing state-oriented philosophy. The utilitarian rationalization of education came to be viewed as 'enlightened', since it was geared to improving the rational functioning of the state, and it was aimed at implementing a form of organizational progress.

In contrast to the English class of professionals, entrepreneurs and industrialists who had accumulated economic and social capital due to the absence of government interference, and who had then increasingly come to exert their power by treating the state as an instrument for the pursuit and furtherance of their self-interest—licensed by a national ethos of economic liberalism and individualism (Porter 1981); and contrary to the emerging French *bourgeoisie*, who were beginning to put external pressure the French state, in the German states the chief opportunities for middle-class social mobility lay in gaining access to positions in the state bureaucracy. The Estates remained firmly intact, and an "inherently conservative nobility in Germany could be enlightened since the 'true enlightenment' posed no threat to its position" (Whaley 1981, 111).

Blanning highlights how the Protestant *Aufklärung* spread to Catholic Germany via the universities: "a significant and growing number of Catholics went north to study at Leipzig, Jena, Halle or Gottingen and then returned to their *alma mater* with quite a new conception of what and how they should teach" (1981, 121), and underlines that the Catholic universities selected compatible elements of Enlightenment thought that could be deployed against the Jesuit monopoly on Catholic educational institutions. Thus, representatives of the Italian Enlightenment, the *Illuministi*, such as Cesare Beccari, tended to be preferable to the French *philosophes*: "When French thinkers did find an audience their ideas were refracted out of all recognition by native intellectual traditions" (Blanning 1981, 121).

The key point here is that the German universities, whether Protestant or Catholic, were not passive recipients of enlightenment thought. Between reception and transmission, ideas were selected, distorted and refracted, blended and incorporated into domestic meaning systems. In terms of Fleck's theory, this is an example of the transformations that inevitably

arise as a result of the "circulation of ideas" (Fleck 1936 [1986], 87). Let us recall: Fleck's theory asserts that the communication of ideas between thought collectives is determined by the distance between them. The greater the temporal and spatial distance between thought collectives, the greater the communicative obstacles, and the greater the transformation/ distortion when ideas are communicated/ translated from one thought collective to another (Fleck 1936 [1986], 85). In 18th century Europe, multiple factors constituted and determined the distances between thought collectives: language barriers, national boundaries, religious denominations and allegiances, the role of institutions (in censoring, filtering, disseminating), the position of the reading public, and the existence of deeply entrenched domestic thought styles.

Jonathan I. Israel draws on the evidence of foreign language publications in libraries across Europe in the 18th century to highlight the paradoxical nature of the intellectual and social elites that drove the Early Enlightenment: their peculiar combination of cultural cosmopolitanism and "universal intellectual concerns" with "remarkably parochial" and narrow outlooks (Israel 2001, 137). Thus, British libraries tended to contain works in English, Latin and French, but hardly any works in Dutch, German, Spanish or Italian. In turn, French libraries contained works in French and Latin, and very few or no works in Italian, Spanish, English, or German (at least until the 1720s, following the rise of interest in English philosophy). Italian libraries consisted of Italian and Latin publications, with perhaps a handful of French works. In Scandinavia, German and Dutch were the "modern languages of cultural exchange" (2001, 139). Similarly, German libraries predominantly comprised works in Latin, German, and Dutch; while Dutch libraries "consisted principally of works in Latin and Dutch, increasingly also with an admixture of French but rarely anything else" (2001, 140). If the works of English authors—such as those of Hobbes, Locke—were present in Northern European libraries, they tended to be Latin editions.

Nevertheless, in the same section of his monumental study, Israel concludes that, despite such cultural and linguistic parochialism, "the great cultural transformation" of the 18th century should still be seen as "a single European Enlightenment", rather than as "many different national Enlightenments". In Israel's preferred optics, the Enlightenment was a continent-wide cultural transformation generated by intellectual innovations emerging at different times, with varying pace and intensities, in five national contexts—France, Britain, Germany, Italy, and the Netherlands (Israel 2001, 140). Given that neither Germany nor Italy cannot be straightforwardly identified as having been nations in the 18th century, Israel's later reformulation is more convincing: he suggests that the great cultural transformation had its

centre of gravity in north-western Europe and was driven by the "ebb and flow of ideas" between the inner circuit of key cities, namely Amsterdam (and other Dutch cities), Paris, London, Hamburg and Berlin, (2001, 141).

From a Fleckian perspective, two points can be made at this point. First, Israel draws on quantitative data to construct historical facts and draw conclusions regarding their historical significance. Library contents are examples of Fleck's passive elements of cognition: once the arbitrary measure of 'a volume' is applied to collections of printed material, statements such as the following can be made: "Locke's personal library of over 3000 volumes was entirely typical". This in turn enables non-arbitrary relations between the volumes to be established and significance to be attached to the ratios:

> Over a third of his books were in English and another third in Latin, with a further 18 per cent in French. The rest amounting to under 5 per cent, mostly comprised works in Greek and Italian, leaving Dutch, German, and Spanish almost totally excluded, despite his having lived and worked for six years in the Netherlands and knowing some Dutch. (Israel 2001, 137)

Following Fleck's theory, the statement that Locke's library was "entirely typical" can be viewed as a historical fact based on, and constructed through, indirect cognitive interaction with two passive elements: collections of printed matter identified as belonging to specific historical individuals and institutions, and the systems of signs encountered in this material that can be identified as characteristic of specific European languages in the period. If the definitions of 'volume' and specific languages are accepted (and it should be borne in mind that the differences between 'Low Dutch', 'Low German' and 'High German' were by no means straightforward), the data contains non-arbitrary elements (the researcher cannot arbitrarily construct a factual statement to the effect that Locke's library contained a proportion of Dutch volumes amounting to 18 per cent of the total). Since Israel refers to Harrison and Laslett's *Library of John Locke* (1971), his cognitive interaction with this collection can be presumed to be indirect, as can his interaction with other collections used for the comparison implicit in the phrase "entirely typical". Thus, Israel constructs historical facts pertaining to European libraries in the late 17th and early 18th centuries through indirect (scholarly) cognitive interaction with passive elements (printed material and sign systems), the application of arbitrary measures and demarcation criteria (volumes and languages), and comparisons of non-arbitrary ratios within a collection and between collections (percentages and fractions, conceptions of typicality). As a historian of intellectual history, Israel employs the method characteristic for his thought style:

historical facts are constructed on the basis of layers of scholarly interaction (based on direct and indirect interaction with passive elements—source texts, scholarship on physical artefacts), then positions are argued on the basis of the significance assigned to these facts: Locke's neglect of Dutch is presented as typifying the tendency of English thinkers/readers to place a higher value on works in English, Latin, and French. Israel's positions are also asserted through discursive struggle with other representatives of his thought collective, whose opposing positions and approaches testify to variation in the thought style. Hence, Israel's assertion that that the cultural transformation of the 18th century should be viewed as "a single European Enlightenment" is implicitly made in opposition to Roy Porter's thesis of multiple, local Enlightenments (Porter and Teich 1981). Thus, in terms of Fleck's theory, the late 20th century/early 21st century thought collective comprised of historians of intellectual history was divided over its framing of the cultural change generated by 18th century thought collectives, and this division determined both the research objects and the approaches adopted to investigate these collectives—and thus ultimately the facts they construct to articulate their positions.

The second—perhaps more important point—is that in both framings, i.e. single Enlightenment vs. multiple, local Enlightenments, distance and barriers are identified as crucial elements that determined the emergence of cultural change. In Israel's account, lack of synchronicity and entrenched linguistic parochialism are factors that generate change in the context of a drive towards universality. Thus, while there were factors that facilitated the emergence of an increasingly pan-European or 'universal' public sphere (epistolary networks, numerous journals that summarised key contributions in the new genre of the review, reading and debating societies, transnational debates in print, the burgeoning translation industry, newspapers, weeklies, and monthlies etc.), change is depicted as emerging across the continent precisely because it took time for a development in one region to be transmitted, received and absorbed (through inevitable adaptation and distortion) into another regional context. Here, change is viewed as occurring through waves of communication that wash back and forth across local European cultures: the waves meet obstacles (censorship, translation delays), swirl into urban whirlpools, are processed through institutions (universities, scientific and debating societies), become caught up in and intermingled with local currents, and are recirculated back towards their sources.

In contrast, the model advocated by Porter, Whaley, and Blanning et al (1981) is more like a family tree. The following is perhaps a plausible extrapolation from their assumptions: when a local tradition receives ideas from other cultural contexts, the marriage initiates a new branch and line of descent, with national contexts constituting separate limbs of Enlightenment.

Hence, if the main trunk of the Enlightenment grew from the Late Renaissance challenge to church authority posed by the Lutheran Reformation and the Copernican hypothesis, it forked into English, Italian and French branches with the advent of the Baconian, Galilean and Cartesian philosophies. At times, branches intermarried, as with *Voltaire's Letters on the English* and the eventual French acceptance of Newtonianism, but they nevertheless remained distinct national 'Enlightenments'. In this model, the German *Aufklärung* would trace its line of descent through the local developments of Protestantism, Confessionalism, Pietism and Cameralism that formed a new, German branch of Enlightenment when the rationalist contributions of Leibniz and Wolff absorbed and responded to the ideas disseminated through the English, French, and Dutch Enlightenments. Then, according to Blanning (1981), the predominantly German Protestant Enlightenment forked into a German Catholic Enlightenment with the absorption of Italian ideas.

Both models of cultural change are fully consistent with Fleck's concepts of the circulation of ideas between thought collectives, and the distance between thought collectives, as being the key determinants of changes in thought styles. Cultural change is thus generated by two distinct factors: 1) developments in communication technologies and communicative practices tending towards universality and homogenization, and 2) barriers that hinder smooth and seamless communication, thereby persistently producing heterogeneity: temporal and spatial distance, language barriers, the inevitable delays and distortions involved in translation, as well as the resistance exerted by local traditions, and the filtering and admixing of ideas performed by institutions (universities, scientific societies).

To put it in counter-factual terms: in the 17th and 18th centuries, in the context of dramatic developments in communication technologies, if European cultures had been largely united in their adherence to a homogenous set of cultural norms and practices; if Latin had remained the *lingua franca*, and European thought collectives had not begun to express and consume ideas and worldviews in the vernacular, then the transmission of ideas across European regions would not have contributed to such a great cultural transformation. According to Fleck's concepts, smooth, rapid communication between thought collectives, with minimal distortion, is not conducive to changes in thought styles—this requires obstacles, distance and distortion.

To sum up, the above reconstruction and analysis of the scholarship focused on the German *Aufklärung* justifies two conclusions. Firstly, the transmission, absorption, and articulation of non-traditional ideas, the adoption of new social practices (e.g., debating, reading and writing non-religious texts), and the appearance of new forms of cultural production (e.g.,

magazines, novels, political pamphlets, philosophical essays and tomes), involved interactions between a wide array of social groups (thought collectives) that were both internally divided and defined by antagonisms with other groups. Secondly, cultural change in Prussia and other German principalities was generated by how these diverse social groups received and responded to the ideas transmitted through non-German waves or branches of the Enlightenment.

It is evident that the Enlightenment/Counter-Enlightenment dichotomy can only be imposed on the textual phenomena to construct simplified facts that are established through suppressing evidence of complex interaction within and between thought collectives. However, the source texts—most obviously Woellner's *Edicts* and Kant's *Conflict of the Faculties*—provide clear evidence that there was indeed antagonism and counteraction between the representatives of thought styles, and thus a certain 'counteraction'. The issue explored in the next section is how this resistance can be framed without resorting to oversimplifying binary frameworks.

6.5.4 The Challenge to Theology – Hobbes, Spinoza and the claims of philosophy

If a broader, European-level perspective is adopted, Kant's clash with Woellner in 1794, and the blows that Kant delivered on behalf of the philosophy faculty in *The Conflict of the Faculties* (1794-98), can be viewed as just one skirmish in a longstanding conflict that can be traced back to the mid-seventeenth century. For example, Reinhart Koselleck and Jonathan I. Israel—scholars with very different approaches to the analysis of the Enlightenment—both identify the mid-seventeenth century as a watershed moment, when a crucial refocusing of antagonism began to occur in Europe: intra-religious, confessional conflict began to pale into significance as theologians and the state authorities came to recognize 'philosophy' as the new enemy.

The means employed to suppress works the works of authors such as Hobbes and Spinoza in the ostensibly tolerant atmospheres of late 17th-century England and Holland—i.e., personal vilification, branding as 'atheist', censorship, court trials, imprisonment, seizing books, punishing printers—became the default strategies employed by the authorities in the German states throughout the eighteenth century, and even into the 1790s. Nearly fifty years after Spinoza's death, Wolff's expulsion from the University of Halle in 1726 was justified by the charge, levelled by the theologians Lange and Buddeus, that Wolff's system opened the gates to Spinozism (Saine 1997, 121) . Even as late as the 1780s, Fritz Jacobi caused a scandal with his (posthumous and dubious) revelation that Lessing had become a Spinozist in his last

years, and that §73 of Lessing's *The Education of the Human Race* was only comprehensible if it was read as an expression of Spinozist pantheism (Saine 1997, 224-25). It can be argued that the punitive measures brought to bear on Kant in the 1790s, i.e., the Censorship Commission's prohibiting sections of *Religion within the Limits of Mere Reason* (1791), the Royal Proclamation of 1794, and the order prohibiting professors from lecturing on his philosophy of religion (1795), were suppressive reactions to a book which made many similar claims for philosophy that Spinoza had already asserted—anonymously but with devastating clarity—in the *Tractatus Theologico-Politicus* (TTP) of 1670.

This following sections trace the following phenomena: firstly, the challenges posed by a new 'naturalist-critical' form of philosophy in the second half of the 17th century; secondly, the theological and conservative reactions to this philosophy's assertions of autonomy and of its right to analyse religion and Scripture; and, thirdly, the critical distancing strategically articulated by other emergent strains of philosophy to distinguish themselves from the *image* of atheism projected onto naturalist criticism.

The ultimate aim of this reconstructive analysis is to shed light on the determinants of Woellner and Kant's textual actions: the former's *Edict* and official reprimand, and the latter's advocacy on behalf of the philosophy faculty in *The Conflict of the Faculties*, were inscribed onto a cultural field in which the available positions were already fixed and encoded by over a century of discursive and institutional conflict. In order to appreciate Kant's unique contributions to the conception and development of the German University, it is necessary to ascertain which elements of Kant's text are determined by established discursive layers and antagonisms, and which introduce concepts from other thought styles (discursive fields) and thus provide the basis for the emergence of cultural change.

In terms of Fleck's theory, the tendency of 17th century naturalist-critical philosophy to increasingly identify itself as 'philosophy' and define itself as explicitly opposed to theology and the ecclesiastical authorities—a tendency that can be clearly tracked in the texts of Hobbes, Lodewijk Meyer, Spinoza, and the Koerbagh brothers—can be viewed as indicating the emergence of a new thought style. Following Hobbes's singular contribution, this thought style was predominantly articulated by an anti-authoritarian and confrontational Dutch thought collective that drew inspiration from natural philosophy, Bible hermeneutics, and democratic republicanism. The radical claims of this thought style provoked a backlash from theological thought collectives across Europe that resorted to vilification and suppression in their attempt to maintain their grip on the universities and state institutions (e.g. Jakob Thomasius at the University of Leipzig). The new philosophy was also condemned by other emergent thought

styles which sought to distance themselves from the more radical aspects of naturalism and Bible criticism, as is evident in the attacks of German natural law philosophy (e.g. Samuel Pufendorf, Christian Thomasius), English empiricism (e.g. Boyle), and theodicy (e.g. Leibniz).

The circumstances and processes leading to the emergence of this new thought style lend themselves to description in Fleck's concepts. Most obviously, in terms of *intellectual unrest*, it is well-documented—to the point of cliché—that the turmoil of the English Civil War constituted the problem which the writing of *Leviathan* sought to solve; while Spinoza's *Tractatus Theologico-Politicus* references the conflict between the Remonstrants and Counter-Remonstrants and clearly takes a side in the long-term, defining struggle between the Republican Dutch States Party and the Royalist Orangists. Thus, in the European philosophical canon, *Leviathan* and *Tractatus Theologico-Politicus* are perhaps the texts most inseparable from their context: they were composed in the midst of political turmoil and socio-economic upheaval, and sought to offer solutions to the normative and epistemic crises that engulfed English and Dutch society.

In terms of the Fleckian circulation of ideas, both Hobbes and Spinoza borrowed concepts and methods from other fields of inquiry, with revolutionary results. Firstly, both philosophers famously suffered from "geometrophilia" (Gottlieb 2017, 50-51; 100-01) and sought to emulate the deductive certainty of Euclidean geometry in their analyses of non-geometric phenomena, with Spinoza even applying Euclidean procedure as the expository form in his *Ethics*. Though their Euclidean obsessions ultimately had some questionable results, e.g., on Hobbes's reputation as a scientist and in Spinoza's deductive leaps, it can be argued that the necessity required in the proofs of geometry functioned as a benchmark that took their reasoning to unprecedented levels of clarity and confidence. Fleck's claim that a thought style determines perception would also justify positing that Hobbes and Spinoza's infatuation with Euclidean demonstrations conditioned their perception of natural phenomena: the irresistible necessity of geometric deductions did not just reflect the chains of mechanical causality seen at work in nature—it operated as a perceptual category that determined how nature was seen. Thus, the application of Fleck's interactionist social epistemology would have to consider Hobbes's materialist determinism and Spinoza's necessitarianism as resulting from the interactive nexus of non-arbitrary passive elements and theoretical projections: since sequences of events observed 'in the natural world' cannot be arbitrarily ordered or reversed, this is taken to confirm the appropriacy of the concept of mechanical causality (developed in natural philosophy/physics) and the concept of necessity (developed in mathematics/geometry); these concepts subsequently guide perception and, strengthened by further confirmation, are posited

as the defining characteristics of 'nature'. The emergence of the radical concept of 'nature' as sole substance, wherein all things happen of necessity, according to a "fixed and unalterable order" (TTP Ch. 3, §3)[68], can be traced to communication between thought styles: the mathematical concept of demonstrative necessity was adopted by philosophy and projected into 'nature' (as a metaphysical concept).

Secondly, as will be explored in more detail in the next sections, Hobbes, Meyer, and Spinoza adopted and put their own spin on the methods of scriptural exegesis that had been developed in distinct schools or traditions: Renaissance humanism, Protestant Scholasticism, the school of Saumur, and even Cartesian exegesis (Rice Pastijn 2005, 3-4). When the thought style of naturalist philosophy borrowed the tools of scriptural exegesis, the consequences were momentous: the interpretative techniques were used to investigate Biblical texts as descriptions of natural events and phenomena, and religion itself was treated as a natural phenomenon.

Thirdly, as with the late Enlightenment and the German *Aufklärung*, 20th century historians of culture and intellectual history drew on assumptions, methods and fashions that led them to frame the onset of the Enlightenment in ways that can identified as typical for their contemporary thought styles. Thus, despite the fact they occupy opposing positions on the political spectrum, in the 1960s both Reinhardt Koselleck and Jürgen Habermas reconstructed a fundamental dichotomy between the public sphere and the state authority, which—put simply—perpetuated the Enlightenment/Counter-Enlightenment dualism. In this big picture model, bourgeois critique relentlessly undermines the reactionary church and absolute state, leading to crisis and revolution. In contrast, more recent accounts from academic scholarship and popular history have presented the period as fuelled by multi-dimensional antagonisms and the complex interaction between numerous intellectual communities. In a prime example of in-depth scholarly analysis, Jonathan I. Israel frames the Early Enlightenment as a threefold conflict between communities across Europe, with radical democrats, the moderate mainstream, and traditional power structures, all mutually opposed (Israel 2001). Then, in an extremely detailed work of popular history, Ritchie Robertson describes the emergence and cross-fertilization of *multiple* Enlightenments—religious, scientific, practical, aesthetic, political (Robertson 2020). Hence a shift can be identified: from big-picture accounts that had no qualms about framing a historical period as a dualistic, polarized struggle between abstract, homogenous cultural entities ("criticism", "Reason", "the bourgeois public", "Revelation" and

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[68] All references to Spinoza's *Tractatus Theologico-Politicus* (TTP) are to the 2007 translation of Michael Silverthorne and Jonathan I. Israel, Cambridge University Press.

"the State"), to more detailed analyses that recognize heterogeneity and are sensitive to unique and problematic phenomena that elude capture by big-picture generalizations.

6.5.5 Hobbes's *Leviathan* (1651) and the onset of the Enlightenment

Koselleck pinpoints the publication of *Leviathan* in 1651 as the inception of the Enlightenment, since it is here that Hobbes first suggests that an alliance between Reason and the Absolutist State is necessary—for suppressing religious conflict and terminating Civil War (Koselleck 1957 [1988], 23-40). For Koselleck, this empowerment of Reason had some consequences that Hobbes foresaw, and some that he failed to anticipate. Thus, the secularization of morality was a foreseeable, inevitable result of Hobbes's recasting moral philosophy as a science based on natural law (*Leviathan*, Ch. XV §40); yet Hobbes also failed to anticipate that reason would one day become emancipated from State control—a decoupling which would have far-reaching consequences when Reason turned its critique on the State itself (Koselleck 1957 [1988], 34-40). In Koselleck's framing, the Enlightenment was a single pathogenetic process whereby Reason, which looms in Koselleck's text as an abstract cultural entity, became freed from theological control and successively discarded cultural inhibitions, applying its critique to the church, religion, the State, the monarch, and finally, in Kant's *Critique of Pure Reason*, to itself.

 Leviathan also constitutes an early example of a naturalistic account of the phenomenon of religion and of philosophical 'criticism' of Scripture. In Chapter XII of *Leviathan*, Hobbes observes that from all Living Creatures, the seed of Religion is found "onely in Man", and this phenomenon is attributed to a range of propensities: the desire to know causes, anxiety about the future, and assigning reality to "creatures of the Fancy" such as ghosts. This leads Hobbes to the distinction between natural religion and revealed religion: the former ("human Politiques") grows from a natural seed and the variety of its inventions are attributable to differences in culture, while the latter ("Divine Politiques") is directed by God's commandment. Crucially, for Hobbes both kinds of religion serve the same purpose: "Obedience, Lawes, Peace, Charity, and civill Society". Thus, from a purely naturalistic perspective, the function of religion—whether natural or revealed—is the same: to teach the duty "required from Subjects".

 In Part III of Leviathan, Hobbes shifts from a naturalistic description of human society organized in accordance with "the Principles of Nature" and "naturall Reason" to the consideration *Of A Christian Commonwealth*, i.e. one which depends on "Supernaturall Revelations". The focus thus shifts from a rational-causal analysis of Natural Man to the

rational analysis of the Word of God. Hobbes employs a combination of Protestant Biblical exegesis and mechanistic-Cartesian reasoning, citing chapters and verses, to dissect phenomena such as: revelation, prophecy, miracles, the authorship and interpretation of the Scriptures, angels, demons, hell, salvation, heaven, the Trinity, martyrdom, excommunication, ecclesiastical law etc. Hobbes's analysis of angels exemplifies his method: he contrasts *Angels* as *Messengers of God* with the imagery of the brain which the Gentiles and Jews mistakenly treated as really subsisting *Incorporeal Substances*. When interpretation is constrained to the text of the Old Testament, *Angel* signifies nothing but the presence of God performing supernatural work. Hobbes concludes with the following functional interpretation:

> There you see Motion, and Speech, which are commonly attributed to Angels, attributed to a Cloud, because the Cloud served as a sign of Gods presence; and was no lesse an Angel, than if it had had the form of a Man, or Child of never so great beauty; or with Wings, as usually they are painted, for the false instruction of common people. For it is not the shape; but their use, that makes them angels. But their use is to be significations of Gods presence in supernatural operations; as when Moses (Exod. 33· 14) had desired God to goe along with the Campe, (as he had done alwaies before the making of the Golden Calfe,) God did not answer, *I will goe, nor I will send an Angell in my stead;* but thus, *My presence shall go with thee*. (*Leviathan,* Ch. XXXIV)

He then asserts that "no text in that part of the Old Testament, which the Church of England holdeth for Canonicall" would allow one to conclude there are permanent things existing in space that are not corporeal. Angels are nothing but "signs of Gods special presence" (*Leviathan* Ch. XXXIV). With a unique combination of uncompromising materialism and Scriptural exegesis, Hobbes dramatically eliminates an entire class of supernatural beings.

Hobbes's philosophical analysis of Scripture is a prime example of what Koselleck describes as "the new art of criticism", or *critique*, that emerged in the 17th century and then characterized Enlightenment thought in the 18th century (1957 [1988], 106-7). Koselleck traces the use of the term 'criticism' (French *critique*, German *Kritik*) back to the Renaissance humanists, who drew on the Greek term χρίνω (to differentiate, select, judge, decide) to denote the evaluation and study of ancient texts. When Scripture came to be subjected to similar philological analysis, this process was also referred to as 'criticism' (1957 [1988], 105). The term 'criticism' took on its polemical connotation in the midst of confessional disputes, when critics increasingly used rationality as a criterion of truth, rather than Revelation: "Thus, in the context of the textual criticism of Holy Scripture, and from out of the religious conflicts, a new

front was formed, remarkable for the novel fact that the spokesmen of the warring Churches were confronted by a common enemy" (1957 [1988], 107). In contrast to the early 17th century natural philosophies of Bacon, Galileo and Descartes, which employed a variety of tactics to camouflage the challenge they posed to theology and seek a compromise with the ecclesiastical authorities, Hobbes straightforwardly identified religion as a potential source of "Faction and Civil war in the Common-wealth, between the *Church* and *State*", if the Civil Sovereign is not also the Chief Pastor, the Governor of both State and Religion (*Leviathan* Ch. XXXIX).

This postulated subordination of religion to the absolute control of the civil sovereign is—in Part 4, Chapter XLVI—bolstered by a lengthy critique of 'Vain Philosophy': the scholastic philosophy prevailing in the Universities, the handmaid to theology. The combined errors of Vain Philosophy and theology amount to a false Philosophy that suppresses the True Philosophy, i.e. those who have "supposed" the heliocentric doctrine "have been punished for it by Authority Ecclesiasticall". Crucially, Hobbes argues that if any authority is to silence philosophers (e.g., because they incite Rebellion or Sedition) it should be "the Authority Civill". Thus, if the ecclesiastical authority attempts to censor philosophy, they thereby take upon themselves Power in their own Right, and this amounts to "Usurpation" (*Leviathan*, Chapter XLVI).

Hobbes's oblique reference to the trial and sentencing of Galileo in 1633, and to the prohibition of his *Dialogue*, thereby involved and engaged *Leviathan* in a broader struggle between theological authorities and the new philosophy. Prohibition and censorship were the first weapons that the ecclesiastical and state authorities reached for when attempting to suppress philosophical texts, and the power struggles between theologians, the State, the universities, philosophers, and the reading public, ran right through the Enlightenment, from the banning of the works of Hobbes and Spinoza in 1670s, to the debates of the *Berliner Mittwochsgesellschaft* in the 1780s, through to Woellner's attempt to silence Kant in the 1790s. Hobbes's position on censorship merits analysis because it is bound up with key Hobbesian conceptual distinctions and dualities which subsequently shaped the structure and terrain of various Enlightenment thought styles.

The issue of censorship—in Hobbes's terms, of governing Opinions and Doctrines—is addressed in Part II, Chapter XVIII, where Hobbes enumerates the rights of an instituted Sovereign and the limitations of his subjects. Since a Sovereign is instituted for the purpose of peace and defence, the Sovereign is the Judge of "the meanes of Peace and Defence", and can do whatever is necessary for "the prevention of Discord at home". Therefore:

> Sixtly, it is annexed to the Soveraignty, to be Judge of what Opinions and Doctrines are
> averse, and what conducing to Peace; and consequently, on what occasions, how farre, and
> what, men are to be trusted withall, in speaking to Multitudes of people; and who shall
> examine the Doctrines of all bookes before they be published. For the Actions of men proceed
> from their Opinions; and in the wel governing of Opinions, consisteth the well governing of
> mens Actions, in order to their Peace, and Concord. (*Leviathan* Ch. XVIII)

Alongside the familiar Hobbesian insistence on the Sovereign's absolute right to control society for the sake of peace, here focused on public speaking and the publication of books, this passage also brings in to play Hobbes's crucial distinction between Actions and Opinions. Hobbes recognizes that opinions and doctrines can lead directly to actions which, in effect, "awake the Warre", since some men "dare take up Armes, to defend, or introduce an Opinion". Therefore, the governing of opinions and doctrines is part of governing actions, and thus of preventing "Discord and Civill Warre" (*Leviathan* Ch. XVIII).

Hence, Hobbes's *Leviathan* provides a clear example of a philosopher examining the causes of social and political turmoil and identifying opinions and doctrines as the chief culprits: the tumult of the 'English Civil War'—a misnomer since the conflict embroiled Scotland, Wales and Ireland—is reduced to a couple of determinants: a) society being "only a Cessation of Armes", due to men being "still in Warre" (*Leviathan* Ch. XVIII); and b) men's willingness to fight for opinions. Patricia Springborg argues that for Hobbes it was the opinions of the Presbyterians and Papists that plunged England into civil war: both the Protestant Puritans and the Roman Catholics denied the authority of the Sovereign, the former insisting on greater independence, the latter appealing to supranational authority (Springbourg 1996, 366-67). The Hobbesian remedy for such challenges to authority and for men's propensity to return to the state of war for the sake of opinions and doctrines was ensuring that the Sovereign had total control over public speaking and the publication of books.

The distinction between action and opinion maps onto another crucial duality that structures Hobbes's reasoning throughout *Leviathan*: the internal vs. external binary opposition. The key point being that the Sovereign has no jurisdiction over "internall Faith" or "inward thought", but only over "externall Worship" or "external acts" (Ch. 31, 40, 42, 43, 45). The distinction is most explicitly connected to the control of speech as an action in Chapter 42, where Hobbes reduces the doctrine of the New Testament to advice, rather than Law, which pertains only to the Commonwealth: "For internall Faith is in its own nature invisible, and consequently exempted from all humane jurisdiction; whereas the words, and actions that

proceed from it, as breaches of our Civill obedience, are injustice both before God and Man". Thus the Sovereign has no control over invisible thought, only over words and actions, and this jurisdiction is civil, or secular, not ecclesiastical or divine.

6.5.6 Koselleck vs. Habermas: Hobbes, the Privatization of Conscience and the Emergence of the Public Sphere

In a tantalizing footnote, Koselleck acknowledges that Hobbes's separation of inward thought and external acts draws on a long-established Western tradition, which can be traced back to Augustine's two-world doctrine, through Thomas Aquinas's distinction between external acts and the inner world of God, to Luther's separation between the spiritual realm and the external office of the rulers. However, according to Koselleck, Hobbes's unique contribution lies in his "functionalist interpretation of conscience", which analyses the inner realm in terms of political motivations and outcomes. In this framing, Hobbes adopts an extra-religious, supra-partisan position which identifies conscience as a cause of instability on two fronts. On the one hand, the "prophets of Revelation", such as Luther, followed their conscience to encroach upon the external realm, and Presbyterians even sought to completely subjugate the secular realm to the spiritual realm. On the other hand, Puritans and Independents opposed their good conscience to the evil external world, entailing a self-righteous rejection of secular authority. Hobbes thus identified conscience—unmoored from unified religious authority—as one of the causes of civil war, and Koselleck reads his reduction of the inner realm to 'opinion' as an attempt to neutralize the potential of conscience as motivation for action (Koselleck 1957 [1988], 27-30).

Koselleck's complex account of Hobbes's intervention requires further unpacking. He seems to suggest that Hobbes's complex strategy of simultaneously removing conscience (inward thought) from the jurisdiction of the Civil Sovereign and endowing the same Sovereign with complete control over the external realm of actions and words (including ecclesiastical doctrine and publicly expressed opinions) has several functional outcomes. First, on the level of the individual, the subject's internal opinions are protected from external interference from the State and/or ecclesiastical authority; the Sovereign only has the right to intervene if the subject's inward thought translates into disobedient action or seditious words. Second, on the level of civil society, the Civil Sovereign's control over religious doctrine protects the Commonwealth and its laws from the usurpation by the ecclesiastical authority and the destabilizing influence of self-righteous religious sects.

The crucial outcome of the diagnosis and solution presented in *Leviathan* is that "Hobbes's man is fractured, split into private and public halves: his actions are totally subject to the law of the land while his mind remains free, 'in secret free'" (Koselleck 1957 [1988], 37). For Koselleck, this fracturing marks the onset of the pathogenetic process of the Enlightenment whereby man's private inner space steadily expanded and—through the emergence of forms of cultural production and social practices, such as the 'Republic of Letters', philosophical criticism, secret societies, and the stage—came to express the opposition of "the bourgeois stratum" to the "absolutist state and ruling church" (1957 [1988], 122). Thus, for Koselleck, Hobbes's internal/external dichotomy underpins the cascade of dualistic concepts and counter-concepts that structure Enlightenment thought: "reason and Revelation, freedom and despotism, nature and civilization, trade and war, morality and politics, decadence and progress, light and darkness" (1957 [1988], 100). In terms of Koselleck's main thesis, the most crucial dichotomy is that between morality and politics. Since Leviathan had absolute control over the sphere of external action, in other words, over politics, and since Hobbes freed inward thought from the jurisdiction of church and state, this became an autonomous sphere of moral judgement. As Piet Styrdom succinctly summarizes Koselleck's argument:

> Politics, the preserve of the state, was separated from morality, the domain in which the subjects found a refuge. The Enlightenment was an articulation of this latter domain, developing the universalistic morality excluded by the state and critically playing it out against the state as soon as the critique of its legitimation foundation, religion, had been completed. (Styrdom 2000, 258)

In this conception, the Enlightenment was an emancipatory process whereby the suppressed and controlled terms in a set of dualisms became liberated and turned on the dominant terms. The thought and opinion confined to the private domain escaped to construct a bourgeois public sphere which subjected the Sovereign to criticism, and ultimately to the moral judgement of its dualistic concepts.

Koselleck's dualistic account aligns with the textual evidence: the fracturing of man that emerges in Hobbes's philosophy can be traced through subsequent Enlightenment discourses and identified in reformulations which maintain the key Hobbesian distinction: the dichotomy of the (inwardly critical) private citizen and the (externally obedient) subject. Most pertinently for the purposes of the current study, over a hundred and thirty years after Hobbes's English intervention on behalf of the new philosophy, this structural fracture reappeared in Kant's 'two-

hats' conception (Laursen 1996) of the public sphere, the *Aufklärung* and the German University: in 1784's *What is Enlightenment?* Kant famously argued that one and the same person must use their reason freely when playing the role of a scholar (*Gelehrte*), but passively obey the government when reasoning as a civil servant (*Beamte*) (Kant 2008, 19); in *The Conflict of the Faculties* (1794), he reformulated this duality by dividing the university institution into two distinct domains: the theology, law, and medicine faculties must obey the commands of the external legislator, but the philosophy faculty is subject only to the laws of reason (Kant 1979, 31-47).

More broadly, for Koselleck and Habermas (circa 1962)—despite their methodological differences and opposed evaluations—the demarcation of religion as a private matter in the late 17th century opened up a space of autonomy which ultimately, in the 18th century, set civil society and the public sphere in opposition to the state (Habermas 1962 [1992], 11-12). Thus, the dualistic conception of a pan-European cultural and political conflict between the public sphere and the state, which is also cast as the Enlightenment vs. Counter-Enlightenment polarity, is rooted in the conviction that the emancipation of the individual's private opinion from theological and state jurisdiction marked a critical moment and turning point in European culture.

In Koselleck's intellectualist account, this occurred through philosophy's relentless deployment of dualistic formulations: Hobbesian conceptual dichotomies underpinned and triggered the cultural and political conflict of the 18th century; then, once set in motion, the pathogenetic process of philosophical critique took on a cultural and political agency of its own—while hypocritically claiming political neutrality—and ultimately came to engulf the French King as well as philosophers themselves with its utopian morality (Kosellleck 1957 [1988], 120-23).

In contrast, the Habermas of *Strukturwandel der Öffentlichkeit* (The Structural Transformation of the Public Sphere) (1962), clearly written in response to Koselleck's thesis, treats the public sphere as a normative "ideological template" that was determined by underlying structural transformations. From this perspective, the process of polarization that pitched the bourgeois public sphere against the state was determined by economic changes and developments in communication technology that fundamentally reshaped the power structures in European societies. Although Habermas does not explicitly outline his methodology, it can be surmised from the fact that philosophers do not receive any detailed consideration until 'Chapter IV The Bourgeois Public Sphere: Idea and Ideology', where he traces the use of the word 'opinion' from Hobbes to Rousseau. The uses of the terms 'opinion', 'public opinion',

'*opinion publique*' and '*öffentliche Meinung*' are thus treated as ideological reflections of primary transformations in the economic base and as downstream of developments in communication technology.

In Habermas's account of these underlying structural transformations (1962 [1992], 14-26), the emergence of capitalist commercial relations and modes of production went hand in hand with the emergence of new communication genres and institutions: merchants, financiers and entrepreneurs required up-to-date news, hence the appearance of private *news letters* and postal services, which subsequently became a distributed public commodity in the form of newspapers and a social institution in the form of the press. Habermas identifies two key functions that the press came to fulfil in European societies from the end of the 17th century: firstly, providing commercial information vital for an emerging class whose economic interests and dependencies extended beyond the self-contained household (*oikos*), and which thus came to have *public relevance*; and secondly, promulgating the instructions and ordinances of the state administration which sought to manage the economy through mercantilist policy.

As the state emerged as an administrative entity separate from the sovereign's personal property, in other words, as a *public authority* focused on taxation and regulation, it needed to be able to address its subjects on a regular basis, and the widespread availability of newspapers and increasing literacy ensured this need could be met: "the addressees of the authorities' announcements genuinely became 'the public' in the proper sense" (Habermas 1962 [1992], 21). However, antagonism between the public authority and the bourgeois public sphere was structurally inevitable, since while a stratum of the new 'bourgeois' class was assimilated into the state administration and civil service (jurists, pastors, professors, schoolteachers etc.), there was another stratum, consisting of bankers, entrepreneurs and manufacturers, that was not assimilable and thus constituted an independent sphere: "This stratum of 'bourgeois' was the real carrier of the public, which from the outset was a reading public" (1962 [1992], 23). Continually addressed and subject to administrative regulation, the public sphere became an "abstract counterpart of public authority", and in turn subjected the administration to "the critical judgement of a public making use of its reason" (1962 [1992], 23-24). Newspapers provided the literate bourgeois stratum with information concerning trade and state policy, but it was the appearance of periodicals and journals across Europe in the second half of the 17th century that facilitated the articulation of *critical judgment* in the public sphere. Habermas cites Christian Thomasius's *Monatsgespräche* of 1688 as an example of the scholarly periodical: a genre that came to shape the text types of the daily press. The reviews and criticism that appeared in periodicals bled into the newspapers in the form of learned articles, hence critical

reasoning spread from the narrow audience of scholars and educated laymen to the broader general public, which increasingly sought to "to compel public authority to legitimate itself before public opinion" (1962 [1992], 25-26)

Thus, in the Habermasian framing of the emergence of the public sphere (in Britain, France and Germany at least), the articulation of critical public opinion in opposition to the state is treated firstly as a *reflection* of the underlying structural transformations and antagonisms occurring at the primary level of production, commodity exchange and social labour; and secondly as facilitated by the emergence of communication technology that distributed critical reasoning in the accessible form of articles and reviews, rather than driven by a top-down dissemination of philosophical tomes. Hence this position, which ultimately draws on the Marxist base-superstructure account of cultural change, implicitly critiques the agential power assigned to critical philosophy in Koselleck's account.[69]

For Habermas, the struggle between the bourgeois public sphere and the state/public authority was most clearly expressed in the controversy over law, encapsulated in the dualism of absolute sovereignty vs. constitutional law. This explicit conflict centred on how civil society was to be regulated: by the secret decisions and decrees of the monarch or in accordance the general and abstract norms and laws established in public and legitimized by public opinion. Again, in Habermas's framing, this conception of law as the embodiment of external, universal and abstract norms reflects underlying structural determinations and dualities:

> These rules, because they remained strictly external to the individuals as such, secured space for the development of these individuals' interiority by literary means. These rules, because universally valid, secured a space for the individuated person; because they were objective, they secured a space for what was most subjective; because they were abstract, for what was most concrete. (Habermas 1962 [1992], 54)

This passage draws on Habermas's division of the public sphere into the 'world of letters' and the 'political realm'. The literary public sphere emerged first, following the liberation of opinion from religious control and explosion of literacy and communication technologies, and was more inclusive, since women could participate in letter writing and the consumption of literature. The public sphere in the political realm rode on the back of the literary public sphere, by converting the forums of discussion developed by the world of letters into a sphere of political debate, which was restricted to male participants. In both cases, however, the

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[69] Habermas's explicit critique of Koselleck's *Kritik un Krise* appeared in 1973, in *Kultur und Kritik*.

autonomy of the individual was grounded in the ownership of property and the privacy of the bourgeois family (1962 [1992], 51-55):

> As a privatized individual, the bourgeois was two things in one: owner of goods and persons and one human being among others, i.e., *bourgeois* and *homme*. This ambivalence of the private sphere was also a feature of the public sphere, depending on whether privatized individuals in their capacity as human beings communicated through critical debate in the world of letters, about experiences of their subjectivity or whether private people in their capacity as owners of commodities communicated through rational-critical debate in the political realm, concerning the regulation of their private sphere. (Habermas 1962 [1992], 55-56)

Thus, following the Glorious Revolution and the triumph of the Protestant middle class in the Whig supremacy, the Hobbesian fracturing of the individual into private and public halves was carried over into the emergent public sphere, which was divided into two complementary modes of communication: 1) via intersubjective communication in the world of letters, the property-owning individual shares experiences from the private confines of their subjectivity with equivalent property-owning individuals; and 2) via rational-critical communication in the political realm, the property-owning individual makes claims upon the public authority, ultimately regarding the law.

When Habermas finally gets to the contributions of philosophers to this process in Chapter IV, which traces the history of the idea of public opinion and the ideology of the public sphere, Hobbes is credited with two things: first—following the accounts of Schmitt and Koselleck, though Habermas only cites the former—the "momentous" reduction of conscience to opinion which privatized religion, and second

> —on the level of intellectual history he nevertheless provided the commentary [*den geistesgeschichtlichen Kommentar*] on a development that, with the privatization of religion and of property and with the emancipation of civil society's private people from the semi-public bonds of the Church and the intermediate powers of the estates, increased the importance of these people's private opinions even more. Hobbes's devaluation of religious conviction actually led to an upward evaluation of all private convictions [*Hobbes' Abwertung der religiösen Gesinnung führt in Wahrheit zur Aufwertung privater Uberzeugung überhaup*]. (Habermas 1962 [1992], 91)

The implicit conception of causality in this passage is complex (or perhaps confused). On the one hand, Habermas reduces Hobbes's texts to providing "a commentary on a development" which increased the importance of private opinion, yet on the other his devaluation of religious conviction is said to have "led to an upward evaluation of all private conviction". In the first case, the rational dissection of Man and the critical analysis of the Christian Commonwealth provided in *Leviathan* is merely an epiphenomenal reflection on transformations that had already occurred in the economic base: private opinion came to have cultural and political significance as a result of the individual (and family unit) acquiring economic significance as feudal society transformed into capitalist society, and Hobbes's texts merely reflect this after the fact. On the other hand, Hobbes's texts are said to have contributed to the importance of private opinion, or at least to its increased value (*Aufwertung*). A possible solution here might be that in terms of rational-critical analysis Hobbes's texts are restricted to the status of commentary, but in the field of normativity (devaluation/upward evaluation – *Abwertung/Aufwertung*) they have causal agency and thus influence (or at least reinforce) social and cultural change.

By way of conclusion, a few key points can be made. First, Habermas's inclusion of economic and communication technology factors sheds more light on the Hobbesian fracturing of the 17th century subject into private and public halves. Koselleck's epistemic model which identifies Hobbes's philosophy as a key determinant of cultural change is subjected to a critique which situates philosophy within a broader field of socio-economic, technological and institutional determinants. Yet the ambiguous status assigned to philosophy within the ideology of the public sphere—as both mere commentary and as a determiner of value (and thus agent of cultural change?)—is inextricably bound up with the problems inherent to the Marxist conception of ideology, that is, with treating thought as an epiphenomenal reflection of processes occurring in the economic base.

Second, despite their opposition in the evaluation of the Enlightenment and the bourgeois public sphere, Koselleck and Habermas's accounts are united their dualistic framing of historical phenomena: in both cases abstract entities are identified and pitched against each other in a fundamental, totalizing binary conflict. On one side there is the bourgeois stratum, criticism, reason, and the public sphere, and on the other is the State, the public authority, the church. While these dualistic framings can be traced back to opposing intellectual allegiances— the existential, polar antagonisms of Carl Schmitt in Koselleck's case, the dialectical antitheses of Hegelian and Marxist reasoning in Habermas's case—they can both be viewed as falling into the trap identified by Vernant (1988, 220): just as modern scholars of ancient Greek thought

remained part of the classical tradition they set out to study, projecting the concepts and distinctions developed in Attic philosophy back into the 'Presocratic' cultural field, Koselleck and Habermas apply the categories and methodological strategies developed by later German post-Enlightenment philosophers back into the diverse cultural fields that began emerging in England and the Dutch Republic in the late 17th century, and in France and the German-speaking regions in the 18th century. While their interpretations do indeed provide us with insights that have retained their value, over sixty years later, it can also be suggested that their approaches also bypassed or suppressed key aspects of the cultural phenomena they were investigating.

Thus, Koselleck identifies Enlightenment thought—which in his account homogenizes the diverse currents of English, French and German philosophy—as profoundly dualistic, and criticizes it as such, but then perpetuates this tendency by casting the 18th century as a pan-European existential confrontation between bourgeois critique and the state. Koselleck depicts Enlightenment criticism as profoundly one-sided, so that "Postulated concepts in turn posited their counter-concepts, which were generally disposed of and 'criticised' in the course of being posited" (Koselleck 1957 [1988], 122), but his own narrative is, as Habermas noted (1973, 357-58), also profoundly one-sided, since all the agency is attributed to the process of critique. The assumption that the Enlightenment was a homogenous, unstoppable pathogenetic-philosophical process entails that in Koselleck's text there is little analysis of heterogeneity and conflict within the Republic of Letters itself, of the adoption of Enlightenment ideas by some state authorities and theologians, or of concerted resistance from thinkers and institutions that deployed a range of strategies to demonize and suppress the more radical strands of Enlightenment thought, and that were forced to redefine traditional conceptions of society and state power.

In turn, while Habermas's application of Marxist categories and methodology sheds light on the economic and communicative determinants of the public sphere, this also results in the reconstruction of an abstract dialectical conflict. Habermas's analysis ultimately assumes that the heterogeneous thought articulated in diverse local contexts across Europe, from 1650 to 1800 and beyond, can be generalized and captured as an abstract cultural entity: *the* bourgeois public sphere. Crucially, Habermas describes the notion that the public sphere was homogenous as "the fiction of the *one* public [*die Fiktion der einen Öffentlichkeit*]; a useful fiction which was accepted because it "had positive functions in the context of the political emancipation of civil society from mercantilist rule and from absolutistic regimentation in general" (1962 [1992], 56). To unmask this fiction, Habermas identifies "the two forms of the public sphere" discussed above: the literary public sphere and the political public sphere (1962 [1992], 51-56),

and addresses variants of the latter: the British case and "Continental Variants" (1962 [1992], 57-73).

However, while Habermas acknowledges heterogeneity in the public sphere in terms of form and national context, the Marxist emphasis on the determinative power of the economic base entails that this heterogeneity could only be conceived as occurring on the level of ideological articulation[70]: the underlying economic transformations were essentially the same wherever they occurred, since in all cases they involved the emergence of a bourgeois class within feudal-absolutist power structures, only varying in terms of *when* this class emerged and the resistance it met. Thus, even if the *one* public sphere was a useful ideological fiction masking heterogenous forms and local variation, the multiple public spheres that emerged at different times and places were nevertheless homogenous in terms of their underlying determinants: they followed the basic blueprint or floorplan [*Der Grundriß*] (1962 [1992], 27).

In Habermas's narrative, it was Marx's critique of the Hegelian conception of the public sphere of civil society that finally demolished the fictions that upheld the bourgeois public sphere, by revealing that it masked bourgeois class interests, created new relationships of power and domination, and instead of allowing universal access in fact excluded those who were not property owners, or rather precluded the participation of those "who possessed their own labour power as their sole commodity" (1962 [1992], 124). Thus, while society became fractured into competing social classes, Habermas maintains Marx's conception of the bourgeois public sphere as a homogenous entity. As Andrew Edgar succinctly summarizes:

> The working classes are excluded, and this entails that a number of fundamental issues are excluded from the debate. The contributors to the public sphere are homogeneous in terms of power and economic interests. Any individual differences between members of the bourgeoisie are typically economic interests, and are worked out in the market. The enormous conflict of economic interests that existed between the working classes and the bourgeoisie is not debated. In effect, it is not even politically recognised. (Edgar 2006, 126)

The notion that all instantiations of the public sphere were essentially homogenous and necessarily followed the same blueprint is ultimately what allows Habermas to produce numerous sentences populated with abstract entities involved in a pan-European dialectical struggle, such as the following: "A political consciousness developed in the public sphere of civil society which, in opposition to absolute sovereignty, articulated the concept of and demand

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[70] On Habermas's later critique of Marx's dialectical materialism, see (Flood 1977) and (Love 1995, 50-51)

for general and abstract laws and which ultimately came to assert itself (i.e., public opinion) as the only legitimate source of this law" (1962 [1992], 54). However, even if the public sphere was formed in accordance with the same structural blueprint whenever and wherever it emerged, and even if it was articulated across Europe through the same new textual genres (newspaper article, journal reviews etc.) and in similar social settings (salons, coffee houses, debating societies etc.), the diversity of European contexts in which the public sphere emerged—religious, political, legal, infrastructural, linguistic and cultural—entailed that the *content* articulated within them was characterized by dynamic heterogeneity and complex interaction. On the basis of Habermas's model, the homogenous blueprint for the transformation of relations of production and consumption necessarily gave rise to heterogenous public spheres, if only due to the fact the blueprint emerged at different times and in diverse places. The public sphere was not just a medium for communication between the bourgeois stratum and the state authorities: it was also a medium for communication between thought collectives in different urban centres, which circulated ideas and engaged in dialogue, but also interacted in heated intellectual conflict.

With his identification of the *one* public sphere as a functional fiction of self-representation, Habermas opened up a path for an analysis of the public sphere that did not conceal fractures and antagonism within the public sphere itself. However, the Habermas of 1962 was more drawn to framing the phenomena in terms of a dialectical struggle and assigning agency to abstract entities, and it is in this regard Habermas can be seen as following in the footsteps of Hegel and Marx, whose dialectical framing of the public sphere he analyses in Chapter IV §14. Thus, like Koselleck, Habermas perpetuated the image of the Enlightenment as a dualistic conflict, but in Habermas's case this was due to the retrospective projection of 19th century dialectical categories, in contrast to Koselleck's Schmittian-antagonistic framing.

These dualistic conceptions of the Enlightenment and the bourgeois public sphere were imposed on cultural phenomena at the expense of currents and aspects of Early Enlightenment thought that did not fit neatly within neat dichotomies. For example, Koselleck and Habermas focused on England, France and the German-speaking states, and completely ignored the contributions of thinkers in the Dutch Republic to enlightenment thought and the emergence of the public sphere. No mention of Spinoza is made in *Critique and Crisis* or *The Structural Transformation*. Neither author gave any detailed consideration to the complex role the universities played in both opposing and supporting the dissemination of enlightenment ideas throughout European society. Yet from the 1670s onwards, and particularly in the German universities in the first half of the 18th century, Spinoza was persistently coupled with Hobbes:

they came to symbolize all that was bad—atheism, materialism, naturalism, determinism and libertinism—in the image constructed to designate the radical destination to which certain currents of the new philosophy would inevitably lead.

6.5.7 The Fractured Public Sphere and the Epicurean Outcasts

At this point, to indicate the suppression that results from Koselleck and Habermas's dualistic framings, we can briefly turn to Jakob Thomasius's lecture against Spinoza's *Theologico-Political Treatise*, which was delivered in 1670, the very year in which Spinoza's book was published anonymously, and thus before Spinoza's authorship was established or common knowledge. Thomasius was Professor of Moral Philosophy at Leipzig University, a bastion of Protestant scholasticism. Leibniz was his student, and they subsequently maintained correspondence, for example regarding the author of the TTP. Jakob was also the father of Christian Thomasius, whose lectures in German at the University of Halle are associated with the beginning of the German Enlightenment. In his invaluable account, Bartholomew Begley provides the background to Jakob Thomasius's lecture against the TTP: Thomasius gave a series of lectures against innovators, including the English doctor Edmund Dickinson, in which he "defended the hegemony of one philosophy in the schools and universities, against what he calls 'democratic philosophy' where everyone, even paid from the public treasury, can teach what they like" (Begley 2018, 3). In the actual lecture, translated by Begley, Thomasius identifies the author of the TTP with atheism, naturalism and libertinism, and explicitly associated him with Hobbes:

> […] a man of course of that religion which […] opens an obvious door to atheism. We tend to call it Naturalism, rudiments or elements of which are in large part made up of the most pestilential principles of the two innovators of our age, sewn together and adulterated. In naming his book, maybe the author hits the nail on the head. For the author conceived the work in two parts, of which one part claims that this libertinism agrees with true faith or religion, the other that it agrees with peace in the republic; the former part smacks of the theology of Edward Herbert, the latter of the politics of Thomas Hobbes. Nor does it seem to owe nothing to the Pre-adamite Peyrère. (Begley 2018, 14)

Thus, we have a professor from the philosophy faculty at a prestigious German university associating an anonymous Jewish philosopher living in Amsterdam with the proponents of

"new teachings" in England and France: Herbert's proto-deism (Waligore 2012), Hobbes's political science, and La Peyrère's radical Bible criticism (Popkin 1987, 42-59), all of which were propagated beyond the confines of the universities. Thomasius clearly identified these new thought styles as a threat to the hegemony of the university-based scholastic philosophy and to Christian society as a whole. Furthermore, Thomasius devotes the greater part of his lecture to tackling Anonymous's (Spinoza's) arguments against censorship—a key component of Spinoza's text which got lost in the slew of vituperative attacks on his supposed atheism.

The issue of censorship, which Hobbes touched on and Spinoza tackled at length, was of paramount importance at the onset of the Enlightenment. During the reign of Charles II, Anglican bishops and royalists began denouncing *Leviathan* as "an atheist's handbook for rebellion", and it was rumoured that Hobbes would be tried for heresy. In 1666, *Leviathan* was investigated by a Commons Committee for atheism, and thereafter the book was effectively prohibited, which led to the enduring image of Hobbes in popular culture—of a dangerous, "immoral Epicurean atheist" (Parkin 2007, 447-49). Then, in the Dutch Republic, the tolerant haven for freedom of thought and the country with the most liberal publishing climate, both Hobbes's *Leviathan* and Spinoza's *Tractatus* were banned in 1674: bookshops were raided, copies confiscated (Deijl 2020).

The dons and lawyers at the English universities responded to Hobbes's attacks by publishing a slew of refutations of his theology and theory of law. At Oxford, *Leviathan* and *De Cive* were "formally banned by university decree in 1683 and publicly burnt" (Mintz 1996, 50) (Springborg 1996, 348). In 1668, Cambridge expelled Daniel Scargill and deprived him of his fellowship for espousing "Atheistical Tenets"; he was only restored to his position after making a public recantation in the University Church, in which he admitted to having been "an Hobbist and an Atheist" and renounced these "execrable Positions" (Mintz 1996, 50-51)

In addition to reaction from governments, religious authorities and the universities, the official campaign of vilification directed at Hobbes and Spinoza led more mainstream thinkers to declare their orthodoxy by distancing their thinking from these 'atheists'.

For instance, in the preface to *Elementorum Jurisprudentiae Universalis* of 1660, Samuel Pufendorf acknowledged his debt to the natural law theory outlined in Hobbes's *De Cive* (Pufendorf 2009, 10-11),[71] yet after receiving fierce criticism from Protestant scholastics

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[71] Pufendorf draws on and obliquely alludes to Hobbes's *De Cive* throughout the text, as in the following typical passage: "Nay, if that fear should prevail over good faith, no civil society could be formed or preserved, but life would have to be spent in perpetual warfare, and therefore in the status of brute beasts" (Pufendorf 2009, 127). See footnote 14.

who associated Pufendorf with Hobbes, and Hobbes with atheism, in 1672 Pufendorf sought to dissociate his philosophy from that of Hobbes by describing the latter as propounding "the old hypothesis of the Epicureans", which was equivalent to accusing Hobbes with atheism (Parkin 2007, 451-52) (Palladini 2020, 149-55).

Another example is provided by the response of three English thought collectives: the 'Cambridge Platonists', e.g. Ralph Cudworth, Henry More, and Anne Conway, the 'empiricists' associated with the Royal Society, e.g. Henry Oldenburg and Robert Boyle, and the Protestant nonconformist dissent, represented by Richard Baxter.

The position of the Cambridge Platonists is best summed up by Lady Anne Conway's rejection of "Hobbesianism" in her *Principles of the Most Ancient and Modern Philosophy* of 1690. While she describes her philosophy as "anti-Cartesianism", since she opposes her vitalist ontology to Descartes' mechanistic conception of nature, at least Descartes was not a materialist, unlike Hobbes and Spinoza:

> BUT, Secondly, as to what pertains to Hobbs's Opinion, this is yet more contrary to this our Philosophy, than that of Cartes; for Cartes acknowledged God to be plainly Immaterial, and an Incorporeal Spirit. Hobbs affirms God himself to be Material and Corporeal; yea, nothing else but Matter and Body, and so confounds God and the Creatures in their Essences, and denies that there is any Essential Distinction between them. These and many more the worst of Consequences are the Dictates of Hobbs's Philosophy; to which may be added that of Spinosa; for this Spinosa also confounds God and the Creatures together, and makes but one Being of both; all which are diametrically opposite to the Philosophy here delivered by us (Chap IX §2). (Conway 1692)

There is significant discursive demarcation at work here: Cartesian rationalism is positioned as still compatible with Christian metaphysics (Conway's Platonic-kabbalistic Christianity is outlined in Chapters IV and V of her book), but the philosophies of Hobbes and Spinoza are identified as fundamental violations of the central material/immaterial, corporeal/incorporeal dualism. Whereas the "grand Errour" of Cartesianism can be replaced with the vitalist principle and ultimately provide the basis for a compromise (hence Leibniz's appreciation of Conway's philosophy (Hutton 2021)), the "one Substance" philosophy of Hobbes and Spinoza simply had to be refuted and positioned beyond the pale.

This demarcation became structurally consolidated in the first half of the 18th century, with the rise of deism, Leibniz's theodicy, and the Leibnizian-Wolffian compromise. The most anti-clerical and anti-theological currents of the "mainstream moderate Enlightenment" (Israel 2001, 9), such as Pierre Bayle's scepticism and Voltaire's scathing satire, were ultimately

palatable to the European mainstream reading public because they were grounded an adherence to Christian metaphysics and founded on a rejection of the constructed images of atheism and materialism which were represented by the infamous writings of Hobbes and Spinoza.

The English empiricist rejection of Hobbes and Spinoza is complex and entangled, since it ranges from Hobbes and Boyle's conflict in the 1660s over the scientific method, documented in detail in Steven Shapin and Simon Schaffer's *Leviathan and the Air-Pump* (1985), to Oldenburg's correspondence with Spinoza in the 1660s and 1670s, in which he mediated between Boyle and Spinoza, to Boyle's philosophical papers written in the 1680s in response to Hobbes and Spinoza's conceptions of nature, miracles and the deity. This convoluted interaction provides a perfect example of how the 'Republic of Letters' or the international literary public sphere operated in the late 17th century and bears witness to significant conflicts emerging between specific thought collectives.

The conflict and positioning can be briefly tracked through highlighting a few communicative moments. Firstly, in similar strategy to that employed by Pufendorf, in *About the Excellency and Grounds of the Mechanical Hypothesis*, published in 1674, Boyle distinguishes his "corpuscular or mechanical philosophy" from the atomistic view of the Epicureans and the view of

> some modern philosophers, that supposing God have put into the whole mass of matter such an invariable quantity of motion, he needed do no more to make the world, the material parts being able by their own unguided motions to cast themselves into such a system" (Boyle 1991, 138-39).

Boyle thereby implicitly defines his version of the mechanical philosophy as distinct from that of Hobbes and Spinoza, which is depicted as self-organizing materialism. In the recapitulation, he further distinguishes his philosophy:

> having first premised, once for all, that presupposing the Creation and general providence of God, I pretend to treat but of things *corporeal*, and do abstract in this paper from *immaterial beings* (which otherwise I very willingly admit) and all agents and operations miraculous or supernatural. (Boyle 1991, 153)

Thus, like Conway, Boyle declares his opposition to Hobbes's conception of God as corporeal and Spinoza's monistic conception of nature, signalling his adherence to orthodox metaphysics and belief in miracles.

Then, following the publication of Spinoza's *Theologico-Political Treatise*, in his letters of 1675 Oldenburg beseeched Spinoza for clarification on the controversial issues of God and Nature, miracles, and the person of Jesus (Spinoza 2002, 940, 943). Boyle's *Letter on Miracles (Mr. Boyle's answer to Spinoza)*, which was probably circulated at the Royal Society, constitutes a refutation of Spinoza in treatise form, insisting that Divine Miracles had occurred, that God is a Free Agent who can overrule his own laws, and that Scripture should be interpreted in this light (Boyle 1963, 213-15).

Boyle distinguished his empiricist philosophy from atheism yet again in *A Free Enquiry into the Vulgarly Received Notion of Nature*, published in 1686, where he sets out his stall on a middle ground, on the one hand attacking atheists for ascribing "so much to nature that they think it needless to have recourse to a deity for the giving an account of the phenomena of the universe", and on the other, the "theists" who simply adduce the "commonly received notion of nature" as "proof of the existence and providence of God" (Boyle 1996, 3). Edward B. Davis and Michael Hunter show that the term "theists" refers to a broad range of antagonists whom Boyle attacks in his typically vague and convoluted style: Aristotelian scholastics, Galenism, the Cambridge Platonism of More and Cudworth, and the vitalism of William Harvey and Francis Glisson (Davis Hunter 1996, xvii-xxii). Boyle's basic argument is that all these theistic schools of thought, despite their differences, are united in their ascribing agency to nature, and making nature into a semi-deity: a conception which actually brings them closer to Epicurean materialism. Thus Boyle presents his conception of nature and God as being that most resolutely opposed to materialism, by insisting on God's omnipotence and depriving nature of all agency:

> I shall add that the doctrine I plead for does, much better than its rival, comply with what religion teaches us about the extraordinary and supernatural interpositions of divine providence. For when it pleases God to overrule or control the established course of things in the world by his own omnipotent hand, what is thus performed may be much easier discerned and acknowledged to be miraculous, by them that admit in the ordinary course of corporeal things nothing but matter and motion, whose powers men may well judge of, than by those who think there is besides a certain semi-deity which they call nature, whose skill and power they acknowledge to be exceeding great, and yet have no sure way of estimating how great they are and how far they may extend. (Boyle 1996, 14)

God is conceived of as a clockmaker, not a puppet master; and nature is a clockwork machine, not an intelligent puppet or vicegerent (Boyle 1996, 12-13)

Throughout *A Free Enquiry*, Boyle tends to refer to the atheist and materialist position with the terms "the Epicureans" and "corpuscularian", but in the last section he takes a direct swipe at Hobbes. For Boyle, the chief error of the heathens, idolaters and infidels was to conceive of God as corporeal—an error perpetuated by the author of *Leviathan*: "And this corporiety of God seems manifestly to be the opinion of Mr Hobbes and his genuine disciples, to divers of whose principles and dogmas it is as congruous as it is repugnant to religion" (Boyle 1996, 159).

Hence, like Conway's refutation of Hobbesianism, the communication between Spinoza, Oldenburg and Boyle, and the circulation of Boyle's papers and publications, provide evidence of fracturing and complex discursive demarcations. Just as Pufendorf sought to protect his natural law philosophy from the charge of Hobbesian atheism, Boyle sought to protect the empiricist natural philosophy, which was developing under the auspices of the Royal Society, from the charge of atheism (Davis Hunter 1996, xiv). Between 1650 and 1686 a crucial break and division emerged in the new mechanistic philosophy, in which questions of method were of secondary importance: the fundamental points of contention were the conceptions of nature and God.

Lastly, in *The Second Part of the Nonconformists Plea for Peace* (1680), Richard Baxter, a leading Protestant nonconformist, focused on the political implications of the "new Philosophers". His purpose was to demonstrate that it was the principles of these "Bruitists" that posed the real danger to the English government, rather than the benign doctrine of the Nonconformists:

> I have not yet heard of any such severe prosecutions of the Bruitists that are for Hobbes, Spinosa, Pomponatius, Vaninus, &c. as have been used against truly Loyal Nonconformists. But their principles are so pernicious, subverting humanity, morality and Government, that I will begin with the recital of them as Spinosa layeth them down, and then add the true fundamentals of Government and morality which confute them. (Baxter 1680, 2)

Baxter's brutal reading of Spinoza's *Theologico-Political Treatise* casts the text as an attack on the patriarchal system, as opening the way to disobeying the father as the head of the family and rebelling against heads of government (Colie 1963, 191). Baxter interprets Spinoza's conception of the state and laws of nature as allowing the individual complete freedom to break any covenant entered into (Baxter 1680, 3-4). Then, like Pufendorf and Boyle, Baxter associates the new philosophers with Epicureanism and atheism:

> It is the will & mercy of God to Princes and to mankind thus to permit those that will be Atheists and Rebels against him to shew the consequents of it, by their inhumane and rebellious opinions against Government: That if Princes will ever set up Epicurisme, Atheisme and Infidelity, they shall set up Rebellion with it, and expose their Lives to every man that hath but list to venture upon a secret or an open assault. (Baxter 1680, 5)

Baxter concludes his section on the "Epicureans" by asserting that "they that hold and publish this, are such as we hold more worthy to be banished five miles from all Cities and Corporations, than our selves" (Baxter 1680, 19). The reference is to the penalties which Nonconformists were subject to following the enactment of the Five-Mile Act (1665).

<p align="center">***</p>

The above excursus has sought to demonstrate that the multidimensional controversies that erupted following the publication of Hobbes's *Leviathan* cannot be squeezed into a straightforward conflict between enlightened critique and the absolutist state (Koselleck), or between the public sphere and the state authority (Habermas), at least not without brutal simplification and passing over crucial aspects of the field of cultural production in Europe at that time. While the state and religious authorities clearly attempted to suppress the dissemination of Hobbesian and Spinozist thought, these 'traditional' authorities were assisted by a groups and individuals that could be identified with the communicative-cultural phenomenon that has been variously described as enlightened critique, the emerging bourgeois public sphere, the Early Enlightenment etc.

Thus, diverse and sometimes opposing groups and networks were united in constructing the image of Hobbes and Spinoza as outcasts and symbols of what would happen if the new philosophy abandoned the core tenets of theistic metaphysics. In England, this banishment was performed in public by Anglican bishops, university theologians and legal scholars, Baconian empiricists at the Royal Society, the Cambridge Platonists, deists, and Protestant Nonconformists; on the continent, by Bayles' scepticism, Pufendorf's natural law philosophy, and Leibniz's theodicy. In other words, the expulsion of Hobbes and Spinoza from the public sphere was enacted by the most orthodox thinkers and also by those representing the cutting edge of critique and the new philosophy; from within state institutions and behind the shelter of the university, yet also from the precarious positions of religious heterodoxy and political exile.

These diverse individuals, groups and networks defined their positions antagonistically, primarily identifying their thought styles through their opposition to the constructed image of Hobbesian-Spinozist materialism, and only secondarily defined their positions in opposition to other thought collectives, which attacked as mistaken but nevertheless deemed entitled to communicate in the Republic of Letters.

A few conclusions can be drawn. First, in contrast to Koselleck and Habermas's dualistic, homogenizing reconstructions of the English-French-German Enlightenment, which ignore the role of thinkers and developments in the Dutch Republic, analysis of the texts circulating between England, the Dutch Republic, and the German Universities of Leipzig and Jena, as well as the social practices associated with these texts (censorship, clandestine publication and distribution), would seem to confirm that the public sphere was fractured and heterogeneous from the very outset. From the perspective of Fleck's theory, this intense intellectual unrest and rapid circulation of ideas between heterogeneous thought collectives would be identified as a key catalyst that enabled the huge cultural transformations of the 18th century.

Instead of a dualistic conception of the Enlightenment, Israel proposes a triangular model, with the three vertices being the moderate Enlightenment, the conservative opposition, and the radical fringe:

> Hence Europe's war of philosophies during the Early Enlightenment down to 1750 was never confined to the intellectual sphere and was never anywhere a straightforward two-way contest between traditionalists and *moderni*. Rather, the rivalry between moderate mainstream and radical fringe was always as much an integral part of the drama as that between the moderate Enlightenment and conservative opposition. In this triangular battle of ideas what was ultimately at stake was what kind of belief-system should prevail in Europe's politics, social order, and institutions, as well as in high culture and , no less, in popular attitudes. (Israel 2001, 11)

Thus, the moderate wing was represented by Newton and Locke in England, and Thomasius and Wolff in Germany, and aimed to effect a "viable synthesis of old and new, and of reason and faith"; whereas the radical fringe was represented by atheists and deists, such as Spinoza, Toland and many other Dutch thinkers that have now been forgotten, who "sought to sweep away existing structures entirely" (Israel 2001, 11). Israel's analysis of the complex and numerous networks with which Spinoza had contact—English and Dutch natural philosophers, Cartesians, radical democrats, Collegiants, Socinians, radical Protestants etc.—sheds light on

the great complexity of the Early Enlightenment and the external determinants of Spinoza's thought. However, Israel's persistent emphasis on the conflict between the moderate mainstream and the radical fringe ultimately imposes yet another rigid and reductive dichotomy on the immensely rich and complex phenomena that his research unearths (a point made by (Talbot North 2010)). Furthermore, his depiction of Spinoza single-handedly transforming "the whole of western thought and culture" (Israel 2001, 166) entailed that Israel explicitly downplayed the impact of Hobbes's thought in England and on the Continent (Israel 2001, 160), passed over the pairing together of Hobbes and Spinoza that was systematically and performatively enacted by a spectrum of hostile discourses, and—while highlighting points at which Spinoza diverged from Hobbes, e.g. on the possibility of miracles and censorship—failed to acknowledge the extent to which Spinoza followed the key tenets of Hobbes's philosophy and only expressed them with greater clarity.

Treating the writings of Hobbes and Spinoza as the expressions of related but distinct thought styles enables their philosophies to be considered as crucial cultural phenomena involved in processes of cultural change—without the need to resort to reductive dichotomies or assign decisive transformational agency to individual thinkers. When viewed from Fleck's perspective, the thought styles of Hobbes and Spinoza have to be conceived of as conditioned by the complex networks of thought collectives they belonged to and interacted with—cooperatively or antagonistically, or a mixture of both.

In Hobbes's case, the key, predominantly cooperative thought collectives would include:

- the scientific circles that Hobbes encountered in England, Italy and France, through his employment with the Cavendish family, and later during his exile in Paris, which brought him into direct contact with Francis Bacon, Marin Mersenne, Pierre Gassendi and, according to Aubrey, Galileo Galilei, and which led to his famous textual interactions with Descartes in the 1640s (Mintz 1996, 4-11) (Popkin 1987, 45). These individuals and networks sparked Hobbes's lifelong interest in geometry, optics, physics and scientific method, but most crucially led to his adoption and radical development of the mechanistic philosophy. Yet within this cooperative context, Hobbes's antagonistic relationship with Descartes' 'two-substance' mechanical philosophy was of paramount importance, since this rejection grounded his 'one-substance' materialism and hence what came to be referred to as his Epicureanism and atheism;

- radical Bible criticism, such as that practiced by Isaac La Peyrère, whom Hobbes befriended in Paris and who used a mixture of Biblical exegesis of anthropological speculation to support his pre-Adamite hypothesis (Popkin 1987, 42-60);

- Anglican Protestantism—in addition to his bitter opposition to Catholicism and Presbyterianism, two enduring positions can be identified running throughout Hobbes's immensely complex stance on religious doctrine: loyalty to the Church of England and scathing anti-clericalism (Springborg 1996). His Erastian arguments for the supremacy of the state over ecclesiastical power and matters of religion are aligned with Richard Hooker's *Of the Lawes of Ecclesiastical Politie* (1597) against the Puritans and Presbyterianism.

Samuel I. Mintz divides Hobbes's enemies into three classes (Mintz 1996, 46-48), which can be treated as both specific and general thought collectives:

- the clergy and sectarians, i.e. Presbyterians, Papists, and Independents, who were accused of usurping the authority of the Sovereign and whose divisive doctrines were ultimately deemed responsible for the English Civil War;

- university teachers: in *Behemoth or the Long Parliament* (1682) Hobbes observed "an university is an excellent servant to the clergy" (1990, 159), thereby identifying the social function of the University. Through indoctrinating students with the worst classical authors and training them in art of scholastic logic-chopping "They thus planted the seeds of rebellion and sedition" (Mintz 1996, 47). Hobbes's extensive critique of 'Vain Philosophy' in *Leviathan* Part 4, Chapter XLVI has already been mentioned; this critique can be situated as a continuation of Bacon's attack on the University as an institution. Hobbes, like Spinoza and Kant after him, scorned the role of "handmaid" assigned to philosophy in the University (Leviathan, XLVII), and Hobbes's assertion of philosophy's independence from religious control has to be seen as an essential element of his thought style;

- lawyers: Hobbes's radical positive law doctrine (i.e., law was only what was legislated by the sovereign) also brought him into conflict with prestigious lawyers like Sir Edward Coke, who defined English law as "based upon the primacy of the common law" (Goldsmith 1996, 291).

Mintz sums up the conflict as follows:

> It will thus be seen that Hobbes's attacks on the clergy, the universities, and the lawyers have a common basis. All three classes contributed to the decline of sovereign power so essential to the stability of the commonwealth: the clergy by asserting that the Church is either independent of the state or superior to it; the lawyers by upholding the view that the common law is an independent entity exempt from the royal prerogative; and the universities by fostering the opinions of the other two classes. If a commonwealth is to avoid civil strife it must curb the power of these three groups. (Mintz 1996, 48)

Thus Hobbes's philosophy was a thought style that primarily and explicitly attacked the thought collectives in control of the key institutions responsible for shaping how and what English people thought: the Church, the Universities, and the Law. Other conflicts, e.g., with Boyle and the Royal Society over the scientific method, or with Cartesians over the mind vs. matter dualism, should be viewed as secondary. At the same time, while representatives of the religious authorities, the Universities and the Law immediately directed their criticism and suppression at Hobbes's writings, when Spinoza's clarification and intensification of Hobbes's materialist-mechanical thought style brought home the danger that this New Philosophy posed to the existing power relations and institutions, a whole spectrum of thought collectives across Europe aligned with the traditional authorities in the demonization of Hobbes-Spinoza as a single, discursively constructed atheistic entity.

This alignment of thought collectives can be identified as a structural determinant of the positions articulated in the texts of Leibniz, Wolff, Hume and Kant, and in the institutional strategies adopted by—and with regard to—the German Universities. The multidimensional conflicts and fractures that defined the Early Enlightenment and the emergence of the public sphere reverberated well into the 18th century and are still very much evident in the pages of Kant's *Critique of Pure Reason*, *Religion with the Bounds of Mere Reason*, and *The Conflict of the Faculties*. In this light, the next section will investigate Spinoza's *Theologico-Political Treatise*, with particular attention paid to the issue of censorship.

6.5.8 Spinoza's *Theologico-Political Treatise* (1670)

In his anonymously published *Tractatu*s, Spinoza went further (and was far more explicit) than Hobbes in stating the case for reason and philosophy, and in attacking the claims and status of theology, as is evident in the following coruscating passage:

> We have established it as absolutely certain that theology should not be subordinate to reason, nor reason to theology, but rather that each has its own domain. For reason, as we said, reigns over the domain of truth and wisdom, theology over that of piety and obedience [*ratio regnum veritatis et sapientiae , theologia autem pietatis et obedientiae*]. For the power of reason, as we have shown, cannot extend to ensuring that people may be happy by obedience alone without understanding things, while theology tells us nothing other than this and decrees nothing but obedience [*Theologia vero nihil praeter hoc dictat nihilque praeter obedientiam imperat*]. Theology has no designs against reason, and cannot have any. For the dogmas of faith (as we showed in the previous chapter) determine only what is necessary for obedience, and leave it to reason to determine how precisely they are to be understood in relation to truth. Reason is the true light of the mind without which it discerns nothing but dreams and fantasies. (*TTP*, Chapter 15 §6).

Hobbes's utilitarian analysis reduced religion to the function of providing the basis for "Obedience, Lawes, Peace, Charity, and civill Society" (*Leviathan* Ch. XXXIV), thereby retaining a potentially positive role for theology ("the doctors of the Church") insofar as these pastors are subordinate to "the chief pastor", i.e. the Sovereign, and contribute to stability (*Leviathan* XXXIX, §5). In contrast to this rather cynical evaluation, Spinoza's more principled democratic republican perspective assigns theology entirely negative functions: on the one hand it corrupts the simple morality of true religion, which is based on justice and charity, and turns it into a source of prejudice, conflict and hatred (*TTP* Ch. 7); on the other hand, theology and Scripture are analyzed in functional terms, and are thereby reduced to promoting *obedience*; a function which oppressive governments abuse, in their efforts to "control people's minds" (Ch. 20 §1).

Spinoza's attempt to emancipate reason from theological control was inseparable from his unique Biblical hermeneutics and his democratic republicanism. Since Spinoza's radical monism posits that all things are natural and all events follow the laws of nature, supernatural phenomena, events and agency are excluded from history; and since the Bible is thus a natural and historical phenomenon, its texts should be interpreted in the same way that natural phenomena are interpreted:

> To formulate the matter succinctly, I hold that the method of interpreting Scripture, does not differ from the [correct] method of interpreting nature, but rather is wholly consonant with it. The [correct] method of interpreting nature consists above all in constructing a natural history, from which we derive the definitions of natural things, as from certain data. Likewise, to interpret Scripture, we need to assemble a genuine history of it and to deduce the thinking of the Bible's authors by valid inferences from this history, as from certain data and principles. (*TTP* Ch. 7 §2).

The immediate consequence of this "completely secular reading of the Bible" (Popkin 2006) is that miracles, conceived as events contrary to the laws of nature, simply cannot occur: the laws of nature are God's decrees and "follow from the necessity and perfection of the divine nature", and a miracle would entail God acting contrary to his own nature (*TTP* Ch. 6 §3). Consequently, miracles in the Holy Scripture are reduced to unusual or complex phenomena of nature that surpass human understanding. Spinoza's method of Bible criticism either interprets Biblical events in terms of natural causes ("It was by the same command of God that the sea opened up a path for the Jews (see Exodus 14.1), namely because of an east wind that blew very strongly for a whole night" (*TTP* Ch. 6 §14), or reduces them to figures of speech or visions whose purpose was to influence the common people's imagination. While Alan Donagan contends that Spinoza's position on miracles falls short of Hume's later—1748—blanket dismissal of reports of miracles as fabrications, since Spinoza allows that non-customary natural phenomena do in fact occur (Donagan 2006, 364), nevertheless, as Israel points out, Spinoza's approach to miracles distinguished him from Hobbes, who cast doubt on miracles but still allowed that God could perform them (Israel 2001, 218), and from those of his contemporaries who claimed to be natural philosophers but who still clung to the possibility of divine intervention in the order of nature, e.g. Boyle, Locke and Newton (Israel 2007, xvi).

Another consequence of Spinoza's method of Bible criticism is a ruthless downgrading of sacred text (from the pure Word of God to imperfect communications adapted to the limited minds of the common people) and of the prophets and prophecy (anyone can access the mind of God with natural knowledge and reason) (*TTP*, Ch. 2, § 25-26). Spinoza does not shy away from the political ramifications of this treatment of the Bible and theology: he asserts that the positive moral philosophy communicated by the Bible, namely the principles of justice and charity, and the role of Christ as a teacher and corrector of minds rather than performer of miracles (Ch. 7 §7), have been distorted, obscured and suppressed by theology and the Church authorities in the service of sovereign powers seeking to exert social control.

For Spinoza, asserting the claims of natural reason and the new philosophy was inseparable from redefining the true purpose of the state, namely freedom/liberty (*Finis ergo reipublicae revera libertas est*), which entails allowing people's "minds and bodies to develop in their own ways in security and enjoy the free use of reason" (Ch. 20 §6). Hence, Spinoza's *TTP* ends with an uncompromising defence of freedom of thought and speech:

> Hence, a government which denies each person freedom to speak and to communicate what they think, will be a very violent government whereas a state where everyone is conceded this freedom will be moderate […] Thus no one can act against the sovereign's decisions without prejudicing his authority, but they can think and judge and consequently also speak without any restriction, provided they merely speak or teach by way of reason alone, not by trickery or in anger or from hatred or with the intention of introducing some alteration in the state on their own initiative. (*TTP* Ch. 20, §4 &7)

In Spinoza's origin story, the state was founded when people surrendered their freedom to *act* according to their own *decisions* and transferred this to the sovereign power, which is henceforth the sole decision-making authority. However, for Spinoza, it is impossible for people to surrender their freedom to think and judge: "the right to private judgment is non-transferable" (Cooper 2006, 100). It is on the basis of this Hobbesian dichotomy between actions and thinking that Spinoza attempts to justify—in complete contrast to Hobbes—allowing everyone to "think what they wish and say what they think" (Ch. 20 §17).

Julie E. Cooper suggests Spinoza's position on censorship "blurs the distinction between speech and thought" (2006, 100)[72]. However, while Spinoza's argument does indeed become entangled and opaque when he defines and tackles the actions, thought and speech that can be classed as "seditious", the radical and confrontational nature of his thesis necessitated a certain amount of textual cloaking. Such a strategy can be conceived of as partly conscious and deliberate, and partly an unconscious response to the intense pressure exerted on Spinoza's text by the discursive struggle it was engaged in. Since Spinoza's argument stakes out claims on the same political-philosophical terrain that Kant entered when addressing the issue of censorship in *What is Enlightenment?* and *The Conflict of the Faculties*, a close analysis of Spinoza's conception of sedition will shed light on the discussions on censorship that animated the public sphere in the late *Aufklärung*.

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[72] A detailed and convincing argument on the overall coherence of Spinoza's *Tractatus Theologico-Politicus* can be found in Yoram Stein's *The Coherence of Spinoza's Theological-Political Treatise* (2021).

Spinoza's adoption of the Hobbesian action vs. thought dichotomy enabled him to argue that since the stability of any state is grounded in people *obeying* the sovereign's decision-making power, people can obey the sovereign's laws and at the same time think these laws are "contrary to sound reason" (§7). Thus, a person can be simultaneously obedient in the sphere of action and critical in the sphere of thought, without this duality undermining the stability of the state. Nevertheless, sedition is not confined to the sphere of action: Spinoza states unequivocally that opinions can be "seditious" (*quaenam opiniones in republica seditiosae sint*). Seditious views are those

> which, simply by being put forward, dissolve the agreement by which each person surrenders their right to act according to their own judgment. For example, it is seditious for anyone to hold that a sovereign power does not have an autonomous right or that one should not keep a promise or that everyone should live according to their own judgment, and other views of this kind which are directly contrary to the aforesaid agreement. It is subversive not so much because of the judgments and opinions in themselves as because of the actions which such views imply. By the very fact that someone thinks such a thing, they are tacitly or explicitly breaking the pact that they made with the sovereign (*TTP* Ch. 20, §9)

For Spinoza, the key element of sedition is breaking the pact with the sovereign, which in essence boils down to a person reasserting their right to *act* according to their own judgment while disregarding, denying or disobeying the decision-making authority of the sovereign power. The agreement with the sovereign can be broken tacitly (by holding views) or explicitly (by expressing views): both are classed as seditious, but it is only when opinions are translated into action that the stability of the state is undermined.

Although Spinoza unequivocally condemns certain seditious actions—e.g., promoting disobedience and conflict (*TTP* Ch.14, §13), introducing alterations in the state on one's own initiative, making false accusations against the magistrate, attempting to abolish the law against the magistrate's will—as those of "agitators and rebels" (Ch.20, §7), he stops short of stating that the communication associated with such actions should be restricted. His anti-censorship arguments are distinctly realistic and practical: he grants that allowing liberty of thought and speech does have some "disadvantages", but insists that a) suppressing liberty of judgment is fundamentally impossible, and b) efforts to control thought and its communication will ultimately prove counterproductive: "Trying to control everything by laws will encourage vices rather than correcting them. Things which cannot be prevented must necessarily be allowed, even though they are often harmful" (Ch20, §10).

Spinoza clearly opposes attempting to control seditious thought and speech through the enactment and enforcement of law, since this leads to the persecution of well-meaning men and ultimately poses a danger to the state—due to the widespread duplicity and dishonesty that ensues (§11). However, no clear alternatives to such preventative measures are offered, apart from vague references to the responses after the fact: the magistrate's authority being able to contain the disadvantages arising from freedom of thought (§10); curbing the fury of the common people (§13).

The last assertion in Spinoza's argument claims that the true advantage of allowing liberty of thought and speech is that it is essential for the advancement of the arts and sciences (§10). The thrust of this claim is that a) the publications of the arts and sciences are distinct from truly seditious texts; and b) the potential dangers associated with seditious speech and deeds are outweighed by the advantages accrued to society if philosophers, scientists and artists are allowed to communicate their ideas freely.

In the last paragraphs of the *TTP*, Spinoza puts forward the most radical argument of his treatise, turning the table to imply that it is those who attempt to curtail liberty of thought and speech through religious decrees who are truly guilty of sedition and responsible for political instability. The argument draws on and combines three elements: the conclusion that religious authorities have a pernicious influence on the state and law, previously established in Chapter 18 (§2, §6), Spinoza's advocacy of democratic republicanism, and his definition of seditious actions.

Since, for Spinoza (following Hobbes), the sovereign power has complete authority over civil and sacred matters, and is thus the sole interpreter of religion and source of religious decree, "any body which attempts to remove this authority from the sovereign power, is attempting to divide the government" (Ch.19, §16). According to Spinoza, "ministers of the word of God" are private individuals who teach piety by the authority of the sovereign powers, and even if the sovereign is impious, no private individual can claim the right to champion the divine law or right against the sovereign: such an attempt would be "seditious" (Ch.19, §19). These assertions ground Spinoza's provocative account of the Church and the clergy within Christian states: the first Christian teachers were private individuals who opposed political power, and Spinoza suggests this is a defining, ineradicable feature of Christianity. Thus, in contrast to the Hebrew state, where "the entire practice of religion and the sacred ministry ensued from the commands of kings" (Ch.19, §22), Christian states are defined by conflicts between the sovereign and individuals who exploit religion to gain power and control the sovereign. Thus, in this characterization, the Christian religion has inherently seditious

tendencies with regard to the sovereign (whether a monarch, the nobility, or a democratic government) and has been a constant source of destabilizing schisms. If the sovereign becomes influenced by the *ecclesia* to the point where the creation of law is controlled by the Church, the sovereign has been "forced to surrender to sedition" (Ch. 20, §14).

The seditious nature of religious decrees and edicts is more apparent in a democratic state—"the one most in harmony with human nature"(§14). Because a democratic government is one "where all the people, or a large part of them, hold power collectively" (Ch. 20 §1), and where it is "agreed that the view which gains the most votes should acquire the force of a decision" (Ch. 20 §14), any *actions* undertaken by individuals on the basis of their own judgment, in particular those which seek to circumvent or capture the democratic government, are in essence undemocratic and a threat to stability: "they have turned the sovereign powers into adherents of their dogmas of which they are recognized as the interpreters" (§16). Spinoza is careful not to state explicitly who is behind such manipulations:

> It is thus plainer than the noonday sun that the real schismatics are those who condemn other men's books and subversively instigate the insolent mob against their authors, rather than the authors themselves, who for the most part write only for the learned and consider reason alone as their ally. Hence, the real agitators are those who attempt to do away with freedom of judgment in a free republic – a freedom which cannot be suppressed. (Ch.20 §16)

Thus, in a free republic, religious edicts that prohibit books and stifle freedom of thought constitute truly seditious actions. The unmistakable implication is that the true enemies of a democratic republic are theologians, preachers and the ecclesiastical authorities.

Letters and biographical facts confirm that Spinoza's immediate target was the preachers, theologians and church officials that exerted power in his local circumstances—who issued condemnations from the pulpit, published refutations, leaned on the authority of the courts, and in some cases destroyed his friends' lives. In the famous letter to Henry Oldenburg, probably from 1665, Spinoza gave three reasons for putting aside his *Ethics* and writing the *TTP*, namely, to remove "the prejudices of theologians" from the minds of sensible people, to defend himself from the charge of atheism, and to vindicate the "freedom to philosophise and say what we think […] for here it is in every way suppressed by the excessive authority and egotism of preachers" (Letter 30, Complete Works, 843). The complex networks of Dutch natural philosophers, Scriptural exegetes, and democratic republicans in which Spinoza was embedded experienced this ecclesiastical-inspired suppression in no uncertain terms. It is

suggested that the uncompromising arguments for the freedom of thought and publication in Spinoza's *Theological-Political Treatise* were written in response to the trial of the Koerbagh brothers in 1668 (Klever 1995, 38-39). Johannes and Adriaen Koerbagh had attempted to popularize the rationalist-philosophical critique of Christianity, drawing on the works of Hobbes, Lodewijk Meyer, Spinoza, and Van den Enden. Following the questioning and imprisonment of Johannes, the Amsterdam magistrates fined and sentenced Adriaen to ten years in Rasphuis prison, where he died after one year, due to the appalling conditions. Adrienn's *Een ligt* (A Light Shining in Dark Places, To Shed Light on Matters Of Theology and Religion) (1668), refuted the doctrine of the Trinity, rejected Christ's divine nature, described the Bible as confused, and "the existence of Hell, Satan, demons, angels, magic, divination, and witchcraft is altogether denied and miracles proclaimed completely impossible" (Israel 2001, 194).

In the unfinished and posthumously published *Political Treatise* (1675-76), Spinoza envisages the tables being turned on theologians and the ecclesiastical authorities when he considers the organization of religion in the ideal aristocratic state. Rather than arguing for a separation of church and state, Spinoza suggests there should be a simple, national religion that is entirely subordinate to the state. Such a religion would prevent sectarianism among the ruling class and, most importantly, to stop them from depriving "their subjects of the freedom to say what they think" (*TP* Ch.8 §46). While other religions would be tolerated, they would also be subject to strict management (small churches with fixed dimensions, suitable distances between them). Thus, the ideal aristocratic state would exert rigid control over religion to curb its the dangerous, destabilizing potential and protect freedom of thought and communication; and we can presume that similar arrangements would have been presented in the unfinished section on Democracy.

From the above it is evident that Spinoza's position on the role of the state with regard to religion is more aligned with Hobbesian control than with the Lockean separation of church and state. As Yoram Stein astutely points out, the distinction between internal and external religion is crucial for the coherence of Spinoza's conception of the state. Internal religion is none of the state's business, since it concerns what people believe and think. In contrast, external religion concerns *actions* to be taken in response to doctrinal messages, and therefore people *behaving* in accordance with justice and piety. Since it pertains to the sphere of action, external religion falls under the remit of the state, and is actually crucial for political stability: it is indispensable for teaching obedience and averting the need for the state to resort to coercion and violence (Stein 2021, 8-10). The thought/action dichotomy thus runs through Spinoza's

conception of religion, the state, sedition and censorship, and entails that his political philosophy advocates Hobbesian control of religion both for the sake of stability and for the protection of the individual's freedom to say what they think. Since the most grievous form of sedition is defined as the ecclesiastical attempt to manipulate the sovereign and restrict freedom of thought, Spinoza suggests that state control of religion would protect the individual from such abuses.

As Mogen Lærke points out, Spinoza's contemporaries tended to ignore his political philosophy and focused obsessively on other elements of the *TTP*, such as the refutation of Moses' authorship of the Pentateuch, and the theory of miracles. Lærke tracks Leibniz's readings of the *TTP* to argue—rigorously and convincingly—that Spinoza's political philosophy was just too extreme to be processed by Leibniz's "conciliatory eclecticism". As a result, Leibniz treated Spinoza's political philosophy as a "particularly dangerous form of Hobbesianism" that was better to ignore than engage with (Lærke 2010, 124).

6.5.9 Returning to Kant's *The Conflict of the Faculties* – philosophy as an institutional thought style

The case for *reason* and *philosophy* put forward in Kant's *The Conflict of the Faculties* (1798) stands in stark contrast to both Hobbes's and Spinoza's attempts to free philosophy the control of the control of various authorities and institutions. Both of these 17th-century thinkers delegitimised the control of the ecclesiastical authorities and university theology faculties; and both asserted complete freedom in the sphere of thought. While Hobbes' allowed the civil sovereign sole control over religious doctrine and the texts that could appear in the public sphere, Spinoza suggested that the civil sovereign should only have control over the state religion: insofar as the public sphere is a sphere of thought and not action, it should not be controlled.

As Laursen (1996) argued, Kant's position shifted from the more radical argument put forward in *What is Enlightenment*? (1784), where he in effect called for "full freedom of the press" (Laursen 1996, 588). In the heyday of *Aufklärung* optimism, in the midst of an explosion of publishing activities and debating societies, Kant was able to argue that individuals' speech could be restricted if this was required by their positions and duties (e.g., as *Beamten*, or civil servants), but when they adopted the role of *Gelehrte* (men of learning or scholars) there should

be no restrictions (Laursen 1996, 588): "the *public* use of one's reason must be free at all times, and this alone can bring about enlightenment among humans" (Kant 2008, 19).

However, following Frederick William II's accession to the Prussian throne in 1786, Woellner's *Edict Concerning Religion* of 1788 (cited in Section 6.5.2)—which sought to rein in Neological preachers and others who "misled the folk in the 'misused name of Enlightenment'" (Saine 1997, 289), after the royal reprimand issued to Kant following the publication of *Religion within the Bounds of Mere Reason* (1793), and against the backdrop of the French Revolution transforming onto The Terror, Kant completely reformulated his conception of freedom of thought and communication. The role assigned to philosophy in this new framework amounts to a rather timid assertion of special privileges within an institutional framework.

The Conflict of the Faculties was written in 1794, but only published in 1798, because, as Kant revealed in a letter to Frederick William II included in the Preface, he had promised to refrain "altogether from discoursing publicly, in lectures or writings, on religion, whether natural or revealed" (Kant 2008, 19). So Kant had kept his promise and waited until after the King's death before publishing. As Paulsen wryly observed, the seventy-year old Kant "was not of the stuff of which martyrs are made" (1902, 50).

The theme of control runs throughout Kant's text. In the *Introduction* he identifies the primary interest of the government as "securing the strongest and most lasting influence on the people", and the subjects that the higher faculties teach are the means to achieving this end (Kant 2008, 27).[73] In the *First Section*, Kant provides further elaboration: the theology faculty guides "the inmost thoughts and guide the most secret intentions" of the government's subjects, the faculty of law controls their "external conduct", and the faculty of medicine controls health to ensure the government has enough people (2008, 33). Since the higher faculties are directly involved in controlling people, the government reserves the right to *sanction* their teachings (2008, 27): as instruments of control, they are in turn subject to control. The higher faculties teach on the basis of writings: the Bible, the code of laws, and medical regulations (2008, 33), hence when the scholars (*Gelehrte*) of the higher faculties communicate the content of these writings to the people, via the tools of the government (clergymen, magistrates and physicians), they must not allow this content to be questioned "in public discourses" (2008, 35). Kant identifies the external authorities for these faculties: the text of the Scriptures, the legislator, and the board of public health.

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[73] "Die Regierung aber interessirt das am allermeisten, wodurch sie sich den stärksten und daurendsten Einfluß aufs Volk verschafft, und dergleichen sind die Gegenstände der oberen Facultäten"

In contrast, the philosophy faculty is defined as falling outside of government control: its teachings are left to the scholar's reason. "It is absolutely essential that the learned community at the university also contain a faculty that is independent of the government's command with regard to its teachings" (2008, 27). Kant grounds his argument in his conception of reason, namely "the power to judge autonomously", and it is this that frees the philosophy faculty from government control, assigns it a higher function, and establishes its power to control the higher faculties:

> So the philosophy faculty, because it must answer for the truth of the teachings it is to adopt or even allow, must be conceived as free and subject only to laws given by reason, not by the government. But a department of this kind, too, must be established at a university; in other words, a university must have a faculty of philosophy. Its function in relation to the three higher faculties is to control them and, in this way, be useful to them, since truth (the essential and first condition of learning in general) is the main thing, whereas the utility the higher faculties promise the government is of secondary importance. (Kant 2008, 43-45)[74]

Kant adheres to the name "the lower faculty" to describe philosophy, referring to the faculty's its traditional propaedeutic function in the German university system (as outlined in Section 6.2), but he also contests it, making ironic reference to the philosophy faculty's traditional designation as handmaid of theology ("though the question remains, whether the servant is the mistress's torchbearer or trainbearer" (2008, 45)).

Due to its higher function—the pursuit of truth, rather than the control of the people, the philosophy faculty can "lay claim to any teaching, in order to test its truth" (2008, 45), whether this is historical cognition (e.g., history, geography, philology and the humanities) or pure rational cognition (e.g., pure mathematics, metaphysics or nature) (2008, 45-46). In addition to this unique truth-testing role within the university, Kant also assigns the philosophy faculty a special role with regard to the public: while the scholars of higher faculties can only express their doubts to one another within the university (2008, 47), the philosophy faculty can examine any teachings transmitted by the higher faculties in public. The sanctioned teachings of the higher faculties are based on the government's human wisdom, and hence are not infallible

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[74] "Also wird die philosophische Facultät darum, weil sie für die Wahrheit der Lehren, die sie aufnehmen oder auch nur einräumen soll, stehen muß, in so fern als frei und nur unter der Gesetzgebung der Vernunft, nicht der der Regierung stehend gedacht werden müssen. Auf einer Universität muß aber auch ein solches Departement gestiftet, d.i. es muß eine philosophische Facultät sein. In Ansehung der drei obern dient sie dazu, sie zu controlliren und ihnen eben dadurch nützlich zu werden, weil auf Wahrheit (die wesentliche und erste Bedingung der Gelehrsamkeit überhaupt) alles ankommt; die Nützlichkeit aber, welche die oberen Facultäten zum Behuf der Regierung versprechen, nur ein Moment vom zweiten Range ist."

(2008, 53). The job of the philosophy faculty is to check that "*everything* put forward in public is true"—even teachings based on revelation (2008, 53).

The Conflict of the Faculties articulates a dim view of the public. Gone are the *Bürger* and *Beamten* addressed in the early 1780s, who, it was hoped, would both fulfil their duties and participate in the public sphere as *Gelehrte*. By 1794, Kant had come to view the public as uninterested in scholarly issues, motivated by the pursuit of pleasure and simple enjoyment, prone to rebellion, and deeply gullible (2008, 45-53). In this new context, the philosophy faculty is required to mediate between the government and the public. Due to the public's lack of critical awareness, the philosophy faculty also has to assume the role of judge: if the clergymen, legal officials and doctors (the businesspeople of the faculties – *Die Geschäftsleute*) bring scholarly debates into the public sphere, when the people are not competent to judge in such matters, "the seeds of insurrection and factions are sown, and the government is thereby endangered" (2008, 57).[75] In such cases, the philosophy faculty is obliged to step in, to protect both the public and the government—thus fulfilling its critical function publicly and issuing verdicts.

So, on the basis of Fleck's theory, the claims that Kant makes on behalf of the philosophy faculty can be construed as the expression of a thought collective attempting to redefine its position in a state institution and thus exert power over other thought collectives within the institution and over the public. The university is explicitly recognised as an instrument of the government's control over the people, and education is primarily conceived in terms of controlling the public's thought, conduct and health. Kant carves out a space of complete autonomy for his own thought collective, which he claims has the right to control the controllers. The theologians had effectively silenced him for four years, and now Kant attempts to get his revenge: philosophers now have a duty to supervise the theologians. Philosophers are finally free to pursue the truth in public, but only within a tightly demarcated context: when they are firmly ensconced within the university, as monitors of communication between the government and the people, and as critical judges in the public sphere. Thus, like Plato before him, whose thought was focused on controlling forms of cultural-educational production, and like Hegel after him, whose thought repeated Plato's exclusionary strategies to establish disciplinary boundaries, Kant exhibits one of the defining characteristics of the thought style of philosophy across the centuries: the desire to supervise and control other knowledges and cultural practices.

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[75] "[…] und der Same des Aufruhrs und der Factionen ausgestreut, die Regierung aber dadurch in Gefahr gebracht wird". This quote is from Kant's footnote in which he explicitly addresses the issue of neology.

A more detailed study of the determinants of Kant's thought style would have to consider Leibniz's theodicy and its relation to Spinoza's deterministic monism, and Wolff's complex attempt to stave off accusations of Spinozism while also taking on the Pietist theology faculty at the University of Halle on behalf of philosophy. Thomas S. Paine describes Wolff's contributions as follows:

> […] unlike most lecturers on philosophy at that time, he treated philosophy as an independent system of knowledge. Up to that time philosophy had functioned primarily as a propaedeutic to the study of theology, and as a result Wolff's predecessors and opponents had no attractive system to offer as an alternative to his. They also had attained no solid European reputation, and above all they demonstrated no facility for writing clear German prose of the kind that Christian Wolf developed for expounding his system. It was he, practically alone who created the German philosophical language […] It was not Wolff's intention simply to disguise Latin works by making them appear to be German: he wished rather to find a German terminology that was adequate to the purpose of writing philosophy, without doing violence to either philosophy or the German language in the process. He was determined, as he puts it, to write 'as pure German speech would demand' ($16). Wolff was doing for philosophy what Luther had done two centuries earlier with his translation of the Bible (Paine 1997, 123)

Kant acknowledges his debt to Wolff's methodology in his Preface to the second edition of the *Critique of Pure Reason* (1788), before criticising him for failing to prepare the field for his metaphysics "by a critique of the organ, namely pure reason itself" (Bxxxvi). To round off, I would like to suggest that a further critique of Kant's "pure reason" would begin from the recognition that this cognitive faculty not particularly pure: it was a thoroughly institutionalised, historically-determined concept that was articulated from within the Prussian university system by a specific thought collective as it rose through the elite at a specific moment in time.

Concluding Remarks

Leszek Nowak's concept of explanatory power was cited in the Introduction as a possible criterium for assessing the application of Fleck's theory made in Chapters 4, 5 and 6. We can recall that Nowak defines explanatory power as "the proportion of facts explained by the theory to the facts in a given domain" (Nowak 2012, 38). Fleck's theory problematizes the concept of facts, stating that they are the result of the interaction between the cognizer and the cognized, and hence of interaction that is determined by the cognizer's thought style. Hence, assessing the facts uncovered—or rather reconstructed—in Chapters 4, 5 and 6 is no straightforward matter. Rather than a quantitative focus on the proportion of facts explained, I suggest the assessment could consider the explanatory power of the reconstructions in a comparative light—an approach which would align with Fleck's project of comparative epistemology. In other words, when compared to the existing research and theoretical analyses, what new phenomena or aspects of the phenomena are brought to light? Of course, always bearing in mind that the researcher's thought style determines where the analytical torch casts its beam.

The second criterium should concern the degree of critical awareness employed during the analysis. There are two ever-present dangers involved in conducting research on thought collectives and styles: first, the projection of contemporary categories into the research material; and second, the uncritical application of inherited assumptions, concepts, frameworks etc. Fleck's theory suggests that both these actions are inevitable: we cannot dispense with our thought style when reading ancient or modern texts; neither can we completely root out the biases and conceptual architecture we have inherited from previous thought collectives. Thus, a key issue for assessing Chapters 4, 5 and 6 is whether applying Fleck's concepts results in a brutal imposition on the texts of Plato, Hobbes, Spinoza, Hegel, Kent etc., or whether these concepts are applied with sufficient critical sensitivity to 'let the phenomena speak for themselves', so to speak. However, I have to acknowledge that the focus on the desire to control, supervise and demarcate that I found myself identifying in the texts of Plato, Hegel and Kant is no doubt shaped by various philosophical and cultural allegiances.

With the above borne in mind, when compared with the existing scholarly analyses of the issues addressed in this thesis—the 'from myth to logos' paradigm, the quarrel between poetry and philosophy in Plato's *Republic*, 'the Socratic caesura', Hegel's use of the concept of Bildung in his reading of Greek philosophy, and the Enlightenment vs. Counter Enlightenment dichotomy—my modest conclusion is that my application of Fleck's theory has brought to light new aspects of the phenomena. In particular, the how the oligarchic thought style emerged and

developed between 432 and 403 BC in response to the structural reorientation of the Athenian economy from an agrarian economy to a thassalocracy; how Plato's *philosophia* emerged as a thought style that interacted with, represented and attempted to control other thought styles and modes of cultural production; how the Platonic-Socratic thought style was transmitted and repurposed by the Ciceronian Socratic caesura in the context of the Late Roman Republic; how the distinct thought styles of modern philosophy (specifically those associated with Hobbes, Spinoza, Kant, Hegel) emerged through complex discursive and institutional conflict; and lastly, how recent and contemporary scholarly analyses can either reduce and simplify the perception of cultural change or, alternatively, open it up and reveal new layers of heterogeneity and complexity.

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