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İÇİNDEKİLER / CONTENTS

Philosophy, History, Event, Badiou Contra Heidegger	9
<i>Patrick Roney</i> Koç Üniversitesi, Felsefe Bölümü, İstanbul Koç University, Department of Philosophy	
What is the Appropriate Method for Practical Philosophy? Hobbes versus Aristotle	35
<i>Manuel Knoll</i> İstanbul Şehir Üniversitesi, Felsefe Bölümü, İstanbul İstanbul Şehir University, Department of Philosophy	
Felsefede Mantıksal Temellendirme Yoluyla Kavrama Yöntemi: <i>Reductio ad absurdum</i> ile <i>Noesis</i>	61
<i>Cengiz İskender Özkan</i> Adnan Menderes Üniversitesi, Felsefe Bölümü, Aydın Adnan Menderes University, Department of Philosophy	
Political Constructivism	85
<i>Alberto L. Siani</i> Yeditepe Üniversitesi, Felsefe Bölümü, İstanbul Yeditepe University, Department of Philosophy	
Mind, Language and Behaviour: Kant's Critical Cautions <i>contra</i> Contemporary Internalism and Naturalism	109
<i>Kenneth R. Westphal</i> Boğaziçi Üniversitesi, Felsefe Bölümü, İstanbul Boğaziçi University, Department of Philosophy	
Felsefe Sorularını Ne İşe Yarar?	151
<i>İlhan Inan</i> Boğaziçi Üniversitesi, Felsefe Bölümü, İstanbul Boğaziçi University, Department of Philosophy	

Experimental Philosophy, Williamson's Expertise Defense of Armchair Philosophy and the Value of the History of Philosophy	169
<i>Lucas Thorpe</i> Boğaziçi Üniversitesi, Felsefe Bölümü, İstanbul Boğaziçi University, Department of Philosophy	
Felsefede Antropolojik Yöntem	185
<i>Betül Çomuksöken</i> Maltepe Üniversitesi, Felsefe Bölümü, İstanbul Maltepe University, Department of Philosophy	
Intrinsic critique, Plato's Line and the Symposium	195
<i>David D. Butorac</i> Fatih Üniversitesi, Felsefe Bölümü, İstanbul Fatih University, Department of Philosophy	
Aristoteles Metinlerinde Methodos Olarak <i>Dialektike</i> ile <i>Apodeiktis</i>	215
<i>Lale Levin Basut</i> Yeditepe Üniversitesi, Felsefe Bölümü, İstanbul Yeditepe University, Department of Philosophy	
Historical Method and Critical Philosophy	225
<i>Volkmar Cidam</i> Boğaziçi Üniversitesi, Siyaset Bilimi ve Uluslararası İlişkiler Bölümü, Boğaziçi University, Department of Political Science and International Relationships, İstanbul	
Epistemic Injustice and the Pythagorean Women	245
<i>Sandrine Bergés</i> Bilkent Üniversitesi, Felsefe Bölümü, Ankara Bilkent University, Department of Philosophy	

WHAT IS THE APPROPRIATE METHOD FOR PRACTICAL PHILOSOPHY? HOBBS VERSUS ARISTOTLE

Mamel KNOLL

Abstract

This paper examines Thomas Hobbes's and Aristotle's understandings of practical philosophy and its appropriate method. Hobbes, who aims at establishing a political philosophy that proceeds *more geometrico* or in the manner of geometry, accuses all his predecessors of having suffered from a lack of method and definitions. This criticism is in particular directed against Aristotle's practical philosophy. The thesis of the paper is that, despite Hobbes's fierce attack on Aristotle, their two approaches to practical philosophy and its method are much more similar than most readers of Hobbes realize.

Keywords: Aristotle, Hobbes, method, methodology, practical philosophy, moral philosophy, political philosophy.

1. Method Matters

Aristotle was the first philosopher to discipline the sciences. He not only introduced the names of many disciplines, like "ethics", "political science", and "physics", but also the distinction between a "theoretical (*theorêtikê*)", a "practical (*praktikê*)", and a "productive (*poietikê*)" science: "all thought is either practical or productive or theoretical" (*Metaphysics*, VI. 1, 1025 b 25).¹ Practical sciences are "ethics" and "political science" and theoretical sciences are "mathematics", "physics", and "theology" (*Metaphysics*, VI. 1, 1026 a 18–19). What Aristotle calls "theology" or "first philosophy" is nowadays called "metaphysics" or "ontology" (*Metaphysics*, VI. 1, 1026 a 15–16). According to Aristotle, theoretical science aims at nothing useful. Theoretical knowledge is an end in itself (*Metaphysics*, I. 2, 982 b 24–27). On the contrary, the goal of practical science is action. Practical knowledge is a means to becoming a

¹ Similar as with many other subjects of Aristotle's thought, Plato is also his forerunner of his division of the sciences. In the *Sophists* Plato divides the "arts (*technai*)" in "productive (*poietikê*)" and "acquisitive (*ktêtikê*)" arts (219 a–e). In the *Politicos* he divides the "sciences (*epistêmas*)" in "practical (*praktikê*)" and "theoretical (*gnostikê*)" (258 e).

virtuous person, for performing virtuous actions, and ultimately for human flourishing or happiness (*eudaimonia*) (*Nicomachean Ethics* = *EN*, I, 3, 1095a 2–6; II, 2, 1103b 26–30). The goal of productive science is a product. With his knowledge the architect aims at producing a house or a temple. However, contrary to a practical activity in private or public affairs, productive activity is not an end in itself but a means for the completion of the product (*EN* VI, 5, 1140b 6–7). It is important to note that in making the distinction between a theoretical, a practical, and a productive science Aristotle uses the terms “science (*epistêmê*)” and “philosophy (*philosophia*)” as synonyms (*Metaphysics*, VI, 1). Therefore, for him “practical science” is the same as “practical philosophy”, and “political science” the same as “political philosophy”.

Aristotle’s assertions that theoretical science aims at nothing useful, and that theoretical knowledge is an end in itself, are problematic. It is true that the knowledge the metaphysician claims about the principles and causes of being has little or no practical relevance. However, the knowledge the theologian asserts about the nature of God can be used in organized religion whose representatives and followers usually also have practical goals like easing their fear of death etc. Certainly the geometrical knowledge of the mathematician was used already in early Egypt to measure the lands and fields of the farmers.²

According to Thomas Hobbes, the most helpful and successful of all sciences is geometry. In the “Epistle Dedicatory” of *De Cive*, Hobbes confronts the useful achievements of geometry with the historical failure of moral philosophy:

And truly the Geometricians have very admirably perform’d their part. For whatsoever assistance doth accrue to the life of men, whether from the observation of the Heavens, or the description of the Earth, from the notation of Times, or from the remotest Experiments of Navigation; Finally, whatsoever things they are in which this present Age doth differ from the rude simpleness of Antiquity, we must acknowledge to be a debt which we owe meerly to Geometry. If the Morall Philosophers had as happily discharg’d their duty, I know not what could have been added by human Industry to the

2 Cf. Edmund Husserl, *Die Krisis der europäischen Wissenschaften und die transzendente Phänomenologie. Eine Einleitung in die phänomenologische Philosophie*, Hamburg: Meiner, 1982.

completion of that happiness, which is consistent with humane life³

Though Hobbes gives geometry an exaggerated credit and seems to neglect arithmetic, his praise elucidates that mathematics is unquestionably a useful science. In the Latin version of the “Epistle Dedicatory”, he even declares that everything mankind owes to (modern) physics, physics itself owes to geometry.

The counterpart of Hobbes’s enormous estimation of geometry is his extreme devaluation of moral philosophy. In *Leviathan* he defines moral philosophy as the science of the “Laws of Nature” and as “nothing else but the Science of what is *Good*, and *Evil*, in the conversation, and Society of man-kind”.⁴ For Hobbes, contemporary moral philosophers not only have no better knowledge of the laws of nature than the ancients, but constantly contradict each other. While the same action is lauded by some, it is condemned by others: “These I say are so many signes, so many manifest Arguments, that what hath hitherto been written by Morall Philosophers, hath not made any progress in the knowledge of the Truth”.⁵ As several passages in Hobbes’s works show,⁶ this criticism is mainly directed against Aristotle who was so influential in the centuries that preceded Hobbes’s times that he was simply called “the philosopher”. On the contrary, Hobbes speaks of the “vain and erroneous Philosophy of the Greeks, especially of Aristotle” and declares: “And I believe that scarce any thing can be more absurdly said in naturall Philosophy, than that which now is called *Aristotles Metaphysiques*; nor more repugnant to Government, than much of that hee hath said in his *Politiques*; nor more ignorantly, than a great part of his *Ethiques*”.⁷

There can be no doubt that Hobbes has a point comparing the achievements of modern natural science that applies mathematics with the accomplishments of moral or practical philosophy. While the achievements of the former

3 Thomas Hobbes, *De Cive. The English Version, Epistle Dedicatory*, (A Critical Edition by Howard Warrender), Oxford: Clarendon Press, 1983, p. 25; cf. Thomas Hobbes, *De Corpore (Elements of Philosophy. The First Section. Concerning Body)*, Chap. 1. In: The Metaphysical System of Hobbes as Contained in Twelve Chapters from his Elements of Philosophy Concerning Body, Together with Briefer Extracts from Human Nature and Leviathan, selected by Mary Whiton Calkis, Chicago: The Open Court Publishing Company, 1905, reprinted 2012 by Forgotten Books, p. 11.

4 Thomas Hobbes, *Leviathan*, Introduction by K. R. Minogue, London/Melbourne: Dent, 1973, chap. XV, p. 82 (Hobbes’s italics).

5 Thomas Hobbes, *De Cive, Epistle Dedicatory*, p. 25.

6 Thomas Hobbes, *Leviathan*, chap. 11, 15, 17, 21, 46; pp. 49, 79–80, 88, 133–134, 366ff. 7 *Ibid.*, chap. 44, 46; pp. 332, 366 (Hobbes’s italics).

are undoubtedly impressive, there are serious reasons to question the accomplishments of the latter. For Aristotle, the final goal of practical science is human flourishing or happiness. However, during Hobbes's lifetime it was almost impossible to lead a good and happy life in England and Europe. Hobbes had to witness not only the bloody civil war in England but the terrifying Thirty Years' War in Europe. During Machiavelli's lifetime, about 150 years earlier, Italy was tormented for decades by constant warfare, slaughter, and sackings. If one considers also the huge amount of wars and civil wars that occurred in the centuries that preceded Machiavelli's times, Hobbes has good reasons to doubt that the previous work of moral or political philosophers led to a substantial betterment of human lives. Today, more than 400 years after Hobbes and after the horrors of the 20th century with two World Wars and several genocides, one has even more good reasons to doubt whether practical philosophy has led to any substantial progress for humankind.

For Hobbes, the "oney reason" for the historical failure of practical philosophy is that "amongst all the writers of this part of Philosophy, there is not one that hath used an idoneous Principle of Tractation".⁸ In modern terminology: all former moral or political philosophers lacked an appropriate or suitable method to treat their subject. In accordance with his enormous estimation of geometry, Hobbes claims that its method can and has to be applied in practical philosophy. A similar project was carried out by Hobbes's contemporary Spinoza in his book *Ethica Ordine Geometrico demonstrata* in which he attempted to present and demonstrate his ethics in a geometrical manner. Another contemporary, René Descartes, was both a mathematician and philosopher, and his philosophy was clearly influenced by mathematics.⁹ Until now, the idea and program of a "mathematical philosophy" that goes back to Pythagoras and Plato is very attractive to many philosophers. Champions of a "mathematical philosophy" like Gottlob Frege claim that philosophy can learn from mathematics and – as a consequence – become a rigorous science.

This paper not only gives an outline of Hobbes's project to establish a political philosophy that proceeds *more geometrico* or *in the manner of geometry*. In a preceding step it also reconstructs Aristotle's main ideas about a practical

8 Thomas Hobbes, *De Cive*, Epistle Dedicatory, p. 25. The Oxford English Dictionary (O.E.D.) lists as synonyms for "idoneous" "ap", "fit", or "suitable". The term "Tractation" is defined as "handling or treating of a subject in discourse or writing" (O.E.D.); cf. Thomas Hobbes, *De Cive*, Epistle Dedicatory, p. 25, n. 3 and 4.

9 Cf. R.H. Moorman, "The Influence of Mathematics on the Philosophy of Descartes". In: *National Mathematics Magazine*, Vol. 17, No. 7 (April, 1943), pp. 296–307.

philosophy and its appropriate method. Finally, in the conclusion, it compares their two opposing methods and understandings of science and asks whether Hobbes's critique of Aristotle is justified. The thesis of this paper is that, despite Hobbes's fierce attack on Aristotle, their two approaches to practical philosophy and its method are much more similar than most readers of Hobbes realize.

2. Aristotle's practical philosophy and its methods

According to Aristotle's ethics, human flourishing or happiness (*eudaimonia*) is the supreme good and end that man can achieve through his actions. Human flourishing is not only the subject of ethics, but of the art or science of politics (*politikē*). These two disciplines are the most important practical sciences. The main subject of Aristotle's ethics – in this paper I shall only consider the *Nicomachean Ethics*¹⁰ – are the human virtues that need to be developed and exercised in order to achieve human flourishing. The primary subjects of Aristotle's *Politics* are the different constitutions of the political community. The *Nicomachean Ethics* and the *Politics*, which contain Aristotle's practical philosophy, constitute a philosophical unity and are supposed to be read together.¹¹

The entire last chapter of Book X of the *Nicomachean Ethics* is a transition to the *Politics*. At the beginning of this chapter, Aristotle concludes that though he has given in outline a sufficient account of human flourishing, the different virtues, friendship, and pleasure, his undertaking is not completed yet. As the aim of practical science is to put knowledge into practice, he still has to examine the right education for becoming virtuous and thus for happiness or human flourishing. Such an education needs to be regulated by law. Therefore, what is left to do is to examine laws and legislation (*nomothesia*) more closely. For Aristotle, legislation is a branch of the art or science of politics (*politikē*), and laws are the product of it (*EN* X. 10, 1180 b 30–31, 1181 a 24; cf. *EN* I. 1, 1094 b 5–6). Before outlining his

10 In all likelihood, the *Magna Moralia* was not written by Aristotle. However, many scholars acknowledge that Aristotle was the author of the *Eudemian Ethics*. Nevertheless, his authorship of the *Eudemian Ethics* is still disputed (cf. Hellmuth Flashar, "Die Platonkritik (I 4)". In: Otfried Höffe (ed.), *Aristoteles: Die Nikomachische Ethik*, Berlin: Akademie, 1995, pp. 63–82, 76, 78). All references to the *Nicomachean Ethics* are based on: Aristotelis, *Ethica Nicomachea*, recognovit brevique adnotatione critica instruxit I. Bywater (Scriptorium Classicorum Bibliotheca Oxoniensis), Oxford 1954.

11 Cf. A.W.H. Adkins, "The Connection between Aristotle's Ethics and Politics". In: David Key/Fred D. Miller, Jr. (eds.), *A Companion to Aristotle's "Politics"*, Cambridge/Oxford: Blackwell, 1991 [first 1984], pp. 75–93.

plan or program of the *Politics*, Aristotle declares that the examination of laws and legislation, together with research on constitutions, will complete his philosophy of humanity (*hê peri ta anthropôpeia philosophia*), which is a philosophy of human affairs and human conduct (EN X. 10, 1181 b 15).

The term "philosophy of humanity" is very close to the term "practical philosophy" because the main sub-disciplines of both sciences are ethics and political science. However, the last chapter of Book X makes clear that the subject matter of the philosophy of man also comprises a science that today we call pedagogy or education. Though Book VIII and the end of Book VII of the *Politics* contain most of Aristotle's thoughts on this subject, he reflects on education in various other contexts of his practical philosophy. The core and foundation of Aristotle's philosophy of man, however, is his political anthropology, which not only claims that man is by nature a political animal (*phusei politikon zôon*), but also defines man as a living being who possesses reason and speech (*zôon logon echon*) (*Politics* = *Pol.* I. 2, 1253 a 9–10¹²). This definition of man is also a central thesis and starting point of his political psychology (EN I, 13) that is closely linked to his political anthropology. After introducing the project of a philosophy of man at the end of the *Nicomachean Ethics*, at the beginning of the *Politics* Aristotle presents its core, his political anthropology and the arguments that support it. This substantiates the view that the *Politics* is a continuation of the *Nicomachean Ethics* which more or less carries out the plan or program that is outlined in its last chapter.¹³

Both Aristotle's *Nicomachean Ethics* and his *Politics* are based on his political anthropology. Already his famous human function (*ergon*) argument in Book I of the *Nicomachean Ethics*, from which he develops his core definition of human flourishing or happiness as virtuous activity of the soul (*psyche*), is based on his political anthropology and especially on his definition of man

¹² All references to the *Politics* are based on: Aristotelis, *Politica*, recognovit brevisque adnotatione critica instruxit W.D. Ross (Scriptorum Classicorum Bibliotheca Oxoniensis), Oxford 1957.

¹³ This is a strong argument against Eckart Schürtrumpf's opinion that the *Politics* represents a new beginning ("Neueinsatz") and doesn't present itself as a continuation of his ethical writings (Eckart Schürtrumpf, *Ammerkungen*. In: Aristoteles, *Politik Buch I*, transl. and commentary by Eckart Schürtrumpf, Berlin/Darmstadt: Akademie, 1991 (Aristoteles, *Werke in deutscher Übersetzung*, ed. by Hellmut Flashar, Vol. 9, Politik, Part I, p. 171); cf. Manuel Knoll, "Die Politik des Aristoteles – eine unitarische Interpretation". In: *Zeitschrift für Politik* (ZP), 2/2011, pp. 123–147, 128–130, and Christopher Rowe, "Aims and Methods in Aristotle's *Politics*". In: David Keyt/Fred D. Miller, Jr. (eds.), *A Companion to Aristotle's Politics*, Cambridge/Oxford: Blackwell, 1991, pp. 57–74, 72–73.

as a living being who possesses reason and speech (*logos*). According to his method to determine what the supreme good for man or happiness is, the first step consists in grasping what the proper function (*ergon*) or activity of man is. This method is based on the conviction that the good of everything that has a specific function or activity lies in the realization of this function or activity. In order to grasp the proper function (*ergon*) or activity of man, Aristotle chooses as a second step a process of elimination. As candidates for the proper function of man he eliminates firstly a "life of nutrition and growth" and secondly a "life of perception".

Clearly life is a thing shared also by plants, and we are looking for man's proper function; so we must exclude from our definition the life that consists in nutrition and growth. Next in order would be a life of perception; but this too we see is shared by horses and cattle and animals of all kinds. There remains, then, an active life of the rational part (EN I. 6, 1097 b 33–1098 a 4).

It is not necessary to reconstruct all the steps through which Aristotle arrives at his core definition of human flourishing or happiness as "activity of the soul in accordance with virtue" (EN I. 6, 1098 a 16–17). The quote above already elucidates that this definition is based on his definition of man as a being who – contrary to all other living beings – possesses reason (*logos*). If man develops and exercises the rational part of his soul he realizes his proper function and natural potential. The rational part of man's soul is divided in a part that possesses reason (*logon echon*) and exercises thought, and in a part that is obedient to reason (EN I. 6, 1098 a 3–8; cf. EN I. 13, 1102 b 25–33). The training of the former part through learning leads to the development of the intellectual virtues that Aristotle discusses in Book VI of the *Nicomachean Ethics*. The formation of the latter part through habituation leads to the development of the ethical virtues that Aristotle discusses in Books II–V.

The result of the human function (*ergon*) argument in Book I is Aristotle's core definition of human flourishing as "activity of the soul in accordance with virtue". However, he is clearly aware that this definition is only a preliminary result that requires elaboration: "This may serve as an outline of the good; for presumably we must first sketch (*hypotyposai*) it roughly and then fill in the details later" (EN I. 7, 1098 a 20–22). This statement informs the reader of the *Nicomachean Ethics* how Aristotle will proceed in the following books. In Books II–V he elaborates on his definition of human flourishing by investigating the main ethical virtues like courage (*andreia*), temperance

(*sôphrosynê*), and justice (*dikaiosynê*). In Book VI Aristotle examines the two primary intellectual virtues, wisdom (*sophia*) and prudence (*phronêsis*).

Aristotle's investigation of the ethical virtues builds on prevailing opinions and traditions of his time. However, in her essay *Non-Relative Virtues: An Aristotelian Approach*, Martha Nussbaum counters the idea that Aristotle's catalogue of virtues just reflects the local traditions and values of his society and time.¹⁴ To defend Aristotle against relativistic interpretations, she gives an original interpretation of the method through which he gains his catalogue of virtues. According to this interpretation, Aristotle identifies universal human experiences and correlates these with specific virtues. As a first step, Aristotle defines a virtue as the right behaviour in one area of experience. For example, everyone experiences the fear of death and significant harm; the virtue "bravery" is subsequently introduced as the name that characterizes the right behaviour for someone confronted with these fears. In a second step, Aristotle gives a more precise definition of this particular virtue.

Though human flourishing is the subject of ethics, it is also the subject of the art or science of politics (*politikê*) that Aristotele calls the most "authoritative (*kyriôtatê*) and directive (*architektonikê*) science" (*EN* I. 1, 1094 a 26–27). Like Plato, Aristotle presupposes different kinds of hierarchies in nature, among men, and among human activities. In line with this, political science has a higher rank than strategy, economics, rhetoric, and other sciences and capacities. Political science decrees which other sciences are to be studied in a political community and to what degree. Political science also legislates what we should do and from what we should refrain (*EN* I. 1, 1094 a 27–b 7). However, Aristotle ranks the theoretical sciences above the practical ones. The theoretical sciences require wisdom (*sophia*) as a combination of science (*epistêmê*) and intuition (*nous*) (*EN* VI 7, 1141 a 19). His examples of wise men are Thales and Anaxagoras. With their wisdom they were able to gain knowledge about the highest beings in the world that are the divine celestial bodies and God. The theoretical sciences and especially theology and metaphysics have the highest rank because they examine subjects of the highest rank. For Aristotle, political science cannot be the best science because man is not the highest being in the world (*EN* VI 7, 1141 a 16–b 8). The knowledge of the practical sciences is not an end in itself, but a means for

14 Martha Nussbaum, "Non-Relative Virtues: An Aristotelian Approach". In: Amartya Sen / Martha Nussbaum (eds), *The Quality of Life*, Oxford: Clarendon Press, 1993, pp. 242–269 (first published in *Midwest Studies in Philosophy*, 1988).

becoming a virtuous person, for performing virtuous actions and ultimately for leading a good and happy life:

Since, then, the present inquiry is not, like others, theoretical in its aim – because we are inquiring not in order to know what virtue (*arête*) is, but how to become good men, since otherwise our inquiry would be useless – we must examine our actions and how they should be performed [...]. But we must first agree that any account of conduct must be given in outline and not precisely (*typo kai ouk akribôs*), just as we said at the beginning that accounts are to be required only in accordance with the subject-matter. Now questions of conduct and expedience have as little fixity about them as questions of what is healthful; and if this is true of the general rule, it is still more true that its application to particular problem admits of no precision (*EN* II. 2, 1103 b 26–1104 a 7; cf. *EN* I. 1, 1094 b 11–1095 a 6).

Contrary to mathematics, the practical sciences are not able to achieve precise (*akribês*) knowledge and to give deductive proofs (*apodexis*). Like all knowledge, practical knowledge has to be adapted to the subject matter. Therefore, it can only be as precise as the subject matter allows. For Aristotle, it is "the mark of an educated mind to never expect more precision in the treatment of any subject than the nature of this subject permits; for accepting plausibility from a mathematician is clearly about as reasonable as demanding deductive proofs from a rhetorician" (*EN* I. 1, 1094 b 23–27). The central subject matter of the practical sciences is human conduct. About this subject matter they are only able to achieve knowledge in outline (*typo*).¹⁵ Human actions and decisions vary a lot from person to person and from situation (*kairos*) to situation (*EN* II. 2, 1104 a 8–9). There is little stability and fixity in human conduct. Aristotle pronounces: "Instances of morally fine and just conduct, which political science investigates, admit of much variety and fluctuation, so that they may be believed to be such only by convention (*nomô*) and not by nature (*physis*). Instances of goods involve a similar kind of variety because they bring harm to many people; some have been destroyed before now by their wealth and others by their courage" (*EN* I. 1, 1094 b 14–19). Though Aristotle recognizes wealth to be a good for human beings, he is aware

15 Cf. Otfried Höffe, "Ethik als praktische Philosophie – Methodische Überlegungen (I 1, 1094a22–1095a13)". In: Otfried Höffe (ed.), *Aristoteles: Die Nikomachische Ethik*, Berlin: Akademie, 1995, 13–38, 26–30.

that it is not a good for everyone because not everyone can handle it and resist the desire to have more and more (cf. *EN* I. 8, 1098 b 12–16; 1099 a 31–b 2; *EN* V. 1, 1129 b 1–6). Though he conceives of courage as one of the cardinal ethical virtues, he is aware that in some situations this virtue can kill a man.

Because of the variety and fluctuation of their subject matter, practical sciences can only argue about “what is for the most part (*hōs epi to poly*)” (*EN* I. 1, 1094 b 21). Practical sciences can merely make statements that are true for the most part of instances and not for all of them. For the same reason they cannot achieve precise knowledge. Ethics and the science of politics can just give general rules and a general outline about what to do, how to act virtuously, and how to lead a good and happy life. These general rules always have to be adapted to specific persons and situations, and applied to particular problems. In order to do this, the intellectual virtue of prudence (*phronēsis*) is needed as a complement to the practical sciences: Prudence is “not concerned with universals only; it must also take cognizance of the particulars, because it is concerned with conduct, and conduct is concerned with particulars” (*EN* VI. 7, 1141 b 14–16).¹⁶ Aristotle illustrates this with an example from medicine. In order to live healthily it is not enough to know the general rule that light meats are digestible and wholesome. One also needs to know particular facts like that chicken is a light and wholesome meat (*EN* VI. 7, 1141 b 18–21). To gain knowledge of the particulars requires experience (*empeiria*) and takes a long time. For Aristotle, experience constitutes an essential part of prudence (*EN* VI. 7, 1141 b 18, 1142 a 14–16; cf. *EN* I. 1, 1095 a 2–4).

Aristotle’s conception of prudence is closely linked to his understanding of a virtue he calls “equity (*epiēkeia*)”. This virtue serves as corrective to the virtue “justice” understood as legal justice. Laws are essentially general in character because all legal rules and provisions are abstracted and generalized from particular cases. However, general rules cannot do justice to all the particular cases that are subsumed to them. Therefore, equity needs to regard the particular cases and to correct the law if it is unable to do justice to them because of its general character (*EN* V. 14, 1137 a 31–1138 a 3).

The intellectual virtue “prudence (*phronēsis*)” is the main topic of Book VI of the *Nicomachean Ethics*. This book also contains an implicit critique of Plato and his teaching that the philosophers should rule and that philosophical theory

¹⁶ For a comprehensive study on prudence (*phronēsis*) see Ralf Elm, *Klugheit und Erfahrung bei Aristoteles*, Paderborn: Schöningh, 1996.

is the necessary basis for practical politics and ethical conduct. Against this teaching Aristotle argues that for a political life one does not need “wisdom (*sophia*)” but prudence. Prudence is the intellectual virtue of experienced politicians like Pericles who are able to discern what is good for themselves and for people in general (*EN* VI. 5, 1140 b 7–11). Wisdom is the intellectual virtue of philosophers like Thales and Anaxagoras whose “knowledge is exceptional, remarkable, difficult, and divine, but useless because they do not seek the human goods” (*EN* VI. 7, 1141b 3–8).

Aristotle’s criticism of Plato’s teaching on the appropriate knowledge for practical politics and ethical conduct is part of his general attack on Plato’s concept of knowledge and method. As Plato points out in the *Politeia*, the ethical and political knowledge philosophers need and seek is theoretical and not empirical. The philosophers gain this knowledge by learning how to turn away their mental attention from sense perception and experience. By doing this they prepare to focus on purely conceptual knowledge which they gain through pure reason and the method of dialectics. For Plato, the first step to acquiring such a kind of knowledge is a study of mathematics. As the true objects of mathematics are not visible but only accessible through pure reason, mathematics is the right training for the dialectical ascent to the ideas and the good in itself (*Rep.* VII, 521 c–540 b).¹⁷ Plato claims that dialectical knowledge of ideas like the idea of justice or the idea of the good is even clearer and more certain than mathematical knowledge (*Rep.* VI, 511 c). This is obviously the antithesis of Aristotle’s teaching that practical knowledge cannot be precise (*akribēs*) or demonstrated like mathematical knowledge. In all likelihood Aristotle’s whole philosophy of the practical sciences and their appropriate method is directed against Plato’s conception of theory and his teaching that philosophical theory is the necessary basis for practical politics and ethical conduct.

Contrary to Plato’s epistemological and scientific approach, the method of Aristotle’s practical science contains strong empirical elements. This is most

¹⁷ In his *Critique of Pure Reason* Kant criticizes Plato’s epistemology and its lack of an empirical component: “Die Mathematik gibt uns ein glänzendes Beispiel, wie weit wir es, unabhängig von der Erfahrung, in der Erkenntnis a priori bringen können. [...] Ebenso verließ Platon die Sinnenwelt, weil sie dem Verstande so enge Schranken setzt, und wagte sich jenseits derselben, auf den Flügeln der Ideen, in den leeren Raum des reinen Verstandes. Er bemerkte nicht, daß er durch seine Bemühungen keinen Weg gewöhne, denn er hatte keinen Widerhalt, gleichsam zur Unterlage, worauf er sich stützen, und woran er seine Kräfte anwenden konnte, um den Verstand von der Stelle zu bringen” (Immanuel Kant, *Kritik der reinen Vernunft*, Hamburg: Meiner, 1976, 43–44, B 8f.).

apparent in Books IV–VI of his *Politics*, which are based on Aristotle's collection of 158 contemporary constitutions and the historical experience of the preceding centuries. The central topics of Book V of the *Politics* are the causes of a political uprising or revolution (*stasis*), how constitutions or political orders originate, and how they can be stabilized and preserved. In order to understand how a tyranny originates, Aristotle looks at different historical examples. These examples show that tyrants mainly started their careers as popular leaders who fought against the elite (*Pol.* V. 10, 1310 b 12–30). Like Machiavelli, the early modern political thinker, Aristotle aims at general rules about politics.¹⁸ He gains these rules through inductions from particular political events, experiences, or cases. For example, one of his general rules claims that democracies become unstable because of the insolence of popular leaders who want to seize the fortunes of the wealthy. As a reaction to these attempts, the wealthy form an alliance and overthrow the democratic system. Aristotle induces this general rule from the fall of the democracies in Kos, Rhodes, Heraclia, Megara, and Cyme. In all these cases the revolution was initiated by the wealthy and the elite (*Pol.* V. 5, 1304 b 20–1305 a 7). From knowledge of the reasons for the fall of a constitution or political order, Aristotle derives his advice on how to stabilize it: "In democracies the wealthy should be spared, not only by not having their possessions divided up, but not their incomes either, which in some constitutions happens unnoticed" (*Pol.* V. 8, 1309 a 14–17).

Finally, Aristotle's *Politics* is based on an analytic method. Aristotle conceives of a polis as a composite whole. The best way to examine it is to divide it into its simplest and smallest elements (*Pol.* I. 1, 1252 a 17–23; cf. *Pol.* VII. 8, 1328 a 22, and *Pol.* III. 1, 1274 b 38–41). These elements are not primarily the individuals, but the three relations of husband and wife, master and slave, and father and children (*Pol.* I. 3, 1253 b 4–8). In Book I of the *Politics*, Aristotle examines mainly the relation of master and slave but briefly also the other two relations that constitute the household (*oikos*). In chapter 2 of Book I, in which Aristotle presents his famous theses that man is by nature a political animal and that the polis exists by nature (*phusei*), he applies his analytic method for the first time. However, instead of presenting the different analytical steps in dividing the polis into its smallest elements, he presupposes the analysis as already finished and takes its results for granted. He starts off from the two original communities of man and woman and master and slave, which are

18 Cf. Manuel Knoll, "Wissenschaft und Methode bei Machiavelli. Die Neubegründung der empirischen Politikwissenschaft nach Aristoteles". In: Manuel Knoll/Stefano Saracino (eds.), *Niccolò Machiavelli – Die Geburt des modernen Staates*, Stuttgart: Steiner, 2010, 91–119.

the basic elements of the household. Men and women, masters and slaves, cannot exist without each other: this is why they unite in the first forms of natural communities. The natural end (*telos*) of the union of man and woman is the reproduction of the species. The community of man and woman doesn't come into being by choice, but from man's "natural desire to leave behind an image of himself", which man has in common with other animals and plants. The natural end of the union of master and slave, of natural ruler and natural subject, is their preservation or survival (*sôtêria*) as individuals (*Pol.* I. 2, 1252 a 28–34). The third basic element of the household or family, the relation of father and children, is only mentioned in the chapter through man's "natural desire to leave behind an image of himself". From the family, Aristotle proceeds to the village (*kômê*), which consists of several households. The village is a union of several families. Its end is "something more than the satisfaction of daily needs" (*Pol.* I. 2, 1252 b 15–16). However, Aristotle doesn't make clear what exactly he means by this and where he draws the line between a village and a polis. From the village he progresses to the polis, which is composed of several villages. The "polis is a perfect community formed from the union of several villages. It has attained the limit of virtually complete self-sufficiency (*autarkeia*). The polis comes into existence for the sake of mere life (*zên*), but it exists for the good life (*eu zên*)" (*Pol.* I. 2, 1252 b 27–30). In this paper it is not necessary to analyze Aristotle's arguments for his thesis that the polis exists by nature. Rather, what matters is that in the first part of chapter two, Aristotle takes the analysis of the polis for granted. Instead of presenting the analysis of the polis into its smallest elements, he conducts its synthesis out of its different elements step by step.¹⁹ Thomas Hobbes has called the latter method the synthetic or composite method which is a counterpart of the analytic or resolutive method.

3. Hobbes's moral and political philosophy and its methods

This section shows that the combination of an analytic or resolutive method with a synthetic or composite method is a central feature of Hobbes's practical philosophy. In regard to Hobbes's fierce critique of Aristotle, it is quite remarkable that this combination of complementary methods is already found in Aristotle's *Politics*. Before investigating this combination in detail, it is necessary to give a brief account of Hobbes's ideal of the philosophical method.

19 Cf. Otfried Höffe, "Aristoteles' politische Anthropologie". In: Otfried Höffe (ed.), *Aristoteles. Politik*, Berlin: Akademie, 2001 pp. 21–35, 22; cf. Manuel Knoll, "Aristotle's Arguments for his Political Anthropology and the Natural Existence of the Polis", in: Michel Narcy/Annick Jaulin/Réfik Güreman (eds.), *Prospectives biologiques sur l'animal politique de Aristote*, upcoming 2016. Cf. bibliography.

Hobbes gives the most comprehensive explanation of his ideal of the philosophical method in chapter 6 of *De Corpore*, which is called *Of Method*. His most basic and general statement about method reads: "It is common to all sorts of method, to proceed from known things to unknown".²⁰ Hobbes connects this universally shared idea of method with his definition of philosophy:

PHILOSOPHY is such knowledge of effects or appearances, as we acquire by true ratiocination from the knowledge we have first of their causes or generation: And again, of such causes or generations as may be from knowing first their effects.²¹

According to this definition, there are two possible starting points for the philosophical search for knowledge. Either we start from the knowledge we have of the causes or generation of an appearance or we start from the knowledge we have of its effects: "Method, therefore, in the study of philosophy, is the shortest way of finding out effects by their known causes, or of causes by their known effect".²² Though Hobbes also uses the term "*material cause*", like most modern philosophers he rejects Aristotle's physics and metaphysics and his distinction of four different kinds of causes. For Hobbes, the term "cause" usually means "*efficient cause*": "An agent is understood to *produce* its determined or certain effect in the patient [...]"²³

Hobbes's example for getting knowledge of an effect from the knowledge of its generation is a circle. If we want to know whether a figure that looks like a circle is actually a circle or not, we need to achieve knowledge of its generation. If the figure was produced starting from a point by the "circumduction of a straight line in a plane" we know that it is a circle.²⁴ Hobbes's example for getting knowledge of causes from the knowledge of their effects seems to be the same one he uses to explain the term "*ratiocination*". By "ratiocination" Hobbes means "*computation*". For him, "*ratiocination*" is the same as "*addition*" and "*subtraction*". In order to explain how we "add and subtract in our silent thoughts, without the use of words," he

20 Thomas Hobbes, *De Corpore*, chap. 6, p. 19.

21 *Ibid.*, chap. 1, p. 6; cf. the repetition of the definition *ibid.*, chap. 6, p. 18.

22 *Ibid.*, chap. 6, p. 18.

23 *Ibid.*, chap. 9, p. 70 (Hobbes's italics); cf. Hobbes's definitions of the terms "efficient cause", "material cause", and "entire cause" *ibid.*, chap. 9, p. 71; cf. *ibid.*, chap. 6, p. 28-30.

24 *Ibid.*, chap. 1, p. 9-10; *ibid.*, chap. 6, p. 33.

uses an example from "knowledge by sense".²⁵ If a person sees something afar she will call it "body". If the object comes nearer she will have a new idea and call it "animated". When standing nearer she hears the voice and perceives other signs of a rational mind she will call it "rational". She will add up these three ideas and compound it to the one idea called "man".²⁶

An important part of Hobbes's method is his search for definitions. The term "man", for example, is defined as "*a body animated, sentient, rational*". Such a definition is nothing but the resolution of the name "man" "into its most universal parts".²⁷ For Hobbes, one of the main reasons why philosophy has made so little progress so far and has produced so many absurd results, is that all previous philosophers have suffered from a lack of method and definitions: "For there is not one of them that begins his ratiocination from the Definitions, or Explications of the names they are to use; which is a method that hath been used only in Geometry; whose Conclusions have thereby been made indisputable."²⁸

Throughout his chapter called *Of Method*, Hobbes explains the different aspects of the analytic and synthetic method and for which task each one is appropriate. Hobbes gives a simple example that illustrates how to achieve knowledge through the analytic or resolutive method. In order to understand how a watch works, it is necessary to take it apart:

for every thing is best understood by its constitutive causes; for as in a watch, or some such small engine, the matter, figure, and motion of the wheels, cannot well be known, except it be taken in sunder, and viewed in parts; so to make a more curious search into the rights of States, and duties of Subjects, it is necessary, (I say not to take them in sunder, but yet that they be so considered, as if they were dissolved, (i.e.) that wee rightly understand what the quality of humane nature is, in what matters it is, in what not fit to make up a civill government, and how men must be agreed among themselves, that intend to grow up into a well-grounded State.²⁹

25 *Ibid.*, chap. 1, p. 7 (Hobbes's italics); *ibid.*, chap. 6, p. 19; cf. Thomas Hobbes, *Leviathan*, chap. 5, p. 18.

26 Thomas Hobbes, *De Corpore*, chap. 1, p. 7-8.

27 *Ibid.*, chap. 6, p. 34 (Hobbes's italics).

28 Thomas Hobbes, *Leviathan*, chap. 5, p. 20.

29 Thomas Hobbes, *De Cive. The English Version*, Preface, p. 32.

This quote from *De Cive* on the analytic method illustrates that Hobbes sees an analogy between a watch or a small engine and a state. Both entities are composite wholes. In *Leviathan*, Hobbes conceives of the state as a "Body Politique" and as an "Artificial man".³⁰ In the introduction he comes back to his analogy between the state and a watch or engines that "move themselves by springs and wheels". These "Automata" have "an artificial life": "For what is the *Heart*, but a *Spring*; and the *Nerves*, but so many *Springs*; and the *Joints*, but so many *Wheels*, giving motion to the whole Body, such as was intended by the Artificer?"³¹ In the "Body Politique" or "Artificial man" the "*Sovereignty* is an Artificial Soul, as giving life and motion to the whole body; The Magistrates, and other *Officers* of Judicature and Execution, artificial *Joints*; *Reward* and *Punishment* (by which fastned to the seate of the Sovereignty, every joint and member is moved to perform his duty) are the *Nerves*, that do the same in the Body Natural: [...]".³² Evidently, Hobbes sees an analogy not only between a mechanical body and a state, but also between a natural body and a mechanical body, and between a natural body and a political body. For Hobbes, the political body is created by man through art. The matter of the political body is man. Man is also its artificer who creates it though covenants or contracts.³³ On the contrary, Aristotle rejects the view of those Sophists who assert that the political community is a contract, and claims that it exists by nature.³⁴ While for Aristotle man is by nature a political animal, Hobbes advances five arguments why men cannot, "as Bees, and Ants, live socially one with another".³⁵

In *Leviathan*, Hobbes starts off by applying an analytic method. He breaks down the political body into its simplest and smallest elements, which for him are the individuals. In order to "rightly understand what the quality of humane nature is", Hobbes moves one step further and divides the individual into its smallest elements which are its desires, drives, appetites etc. From there he goes on to compose a political body using the synthetic method. The starting point of this composition is a hypothetical state of nature that is conceived of as an anarchic state without a coercive power that is able to keep the peace. Hobbes shows how rational calculation leads the way to leave this state of

30 Thomas Hobbes, *Leviathan*, Introduction, p. 1.

31 Ibid. (Hobbes's italics).

32 Ibid. (Hobbes's italics).

33 Ibid.; cf. Ulrich Weiß, *Das philosophische System von Thomas Hobbes*, Stuttgart-Bad Canstatt: Frommann-Holzboog, 1980.

34 Cf. Manuel Knoll, "Aristotle's Arguments for his Political Anthropology and the Natural Existence of the Polis".

35 Thomas Hobbes, *Leviathan*, chap. 17, p. 88.

confrontation and war towards a political state of cooperation and peace. In accordance with this procedure, Hobbes names the first part of *Leviathan Of Man* and the second *Of Commonwealth*.

Hobbes's project is to establish a political philosophy that proceeds *more geometrico* or *in the manner of geometry*. Geometry was the most developed Greek science. Euclid wrote his famous *Elements* after Aristotle's death around 300 BC. He could build on a substantive amount of research from his predecessors which he combined and presented as a coherent whole. Euclid's geometry is an "axiomatized deductive system: he selects a few simple principles, or axioms, which he posits as the primary truths of his subject, and from those axioms he derives, by a series of logically compelling deductions, all the other truth of geometry."³⁶ Following Euclid's geometry as a model, also Hobbes searched for principles, or axioms, that serve as the primary truths of his subject. The principles Hobbes discovers should be understood as "anthropological axioms" because the primary truths he finds about politics are truths about man: "the principles of the politics consist in the knowledge of the motions of the mind", or "the appetites of men and the passions of their minds".³⁷

In different writings Hobbes points out similar human appetites and passions that he understands as the primary anthropological truths. In *Leviathan*, he names as the strongest human passions the "Desire of Power, of Riches, of Knowledge, and of Honour. All which may be reduced to the first, that is Desire of Power. For Riches, Knowledge and Honour are but severall sorts of Power".³⁸ Hobbes even claims as a "general inclination of all mankind" the existence of "a perpetual and restless desire of Power after power, that ceaseth onely in Death".³⁹ Power is not only an instrument to satisfy the basic human desire for pleasure and for living well. The possession of power also allows men to assure that they can satisfy this desire in the future. Furthermore, power and the accumulation of power is a means for human self-protection and self-preservation, especially if there is no common power or state that takes care of this task. The ends human beings pursue are "principally their owne conservation, and sometimes their delectation only".⁴⁰ In the "Epistle

36 Jonathan Barnes, *Aristotle. A Very Short Introduction*, Oxford/New York: Oxford University Press, Revised Edition, 2000, p. 39.

37 Thomas Hobbes, *De Corpore*, chap. 6, p. 26.

38 Thomas Hobbes, *Leviathan*, chap. 8, 35.

39 Ibid., chap. 11, p. 49.

40 Ibid., chap. 11, p. 49; *ibid.*, chap. 13, p. 63.

Dedicatory" of *De Cive* Hobbes makes clear that these principles are his anthropological axioms from which he derives his whole political philosophy:

Having therefore thus arrived at two maxims of humane Nature, the one arising from the *concupiscible* part, which desires to appropriate to it selfe the use of those things in which all others have a joynt interest, the other proceeding from the *rationall*, which teaches every man to fly a contre-naturall Dissolution, as the greatest mischiefe that can arrive to Nature; Which Principles being laid down, I seem from them to have demonstrated by a most evident connexion, in this little work of mine, first the absolute necessity of Leagues and Contracts, and thence the rudiments both of morall and of civill Prudence.⁴¹

While the first anthropological truth or axiom is based on the desirous or voluptuous part of the human being, the second is grounded on its rational part. The desirous part aims at pleasure and the rational part "teaches every man" to avoid death as the greatest harm to man as a natural being.

How does Hobbes achieve his anthropological truths or axioms from which he derives his political conclusions? For him, there is a long way using the synthetic method and a short way using the analytical one. The long way starts "from the very first principles of philosophy".⁴² The basis and beginning of philosophy is the knowledge that all universal things "have all but one universal cause, which is motion".⁴³ Through the knowledge of the universal things and their causes we achieve "in the first place their definitions". For example, "place is that space which is possessed or filled adequately by some body" or "motion is the privation of one place, and the acquisition of another".⁴⁴ Next is the knowledge about the generation of figures. For example, a line is made by the motion of a point. From geometry the inquiry moves on to "that part of philosophy which treats with motions" and from there to physics. For Hobbes, "After physics we must come to moral philosophy; in which we are to consider the motions of the mind, namely, appetite, aversion, love, benevolence, hope, fear, anger, emulation, envy, etc.; what causes they have, and of what they be causes."⁴⁵

41 Thomas Hobbes, *De Cive. The English Version*, Epistle Dedicatory, p. 27 (Hobbes's italics).

42 Thomas Hobbes, *De Corpore*, chap. 6, p. 25.

43 Ibid., chap. 6, p. 22.

44 Ibid., chap. 6, p. 22–23 (Hobbes's italics).

45 Ibid., chap. 6, p. 23–24 (Hobbes's italics).

Finally, "civil philosophy" is based on the insights and truths of moral philosophy.

It seems that Hobbes was clearly aware of the difficulties connected to his scientific project of achieving demonstrable knowledge of the anthropological axioms through the synthetic method. This is shown by his statement that "the causes of the motions of the mind are known, not only by ratiocination, but also by the experience of every man that takes the pains to observe those motions within himself".⁴⁶ Hobbes's statement elucidates that he is convinced that there exists an empirical short-cut to reach the anthropological axioms. In order to use it, one only needs to observe oneself. Through self-observation, introspection and self-analysis one can gain experience of the general human passions and appetites. Those who have not learned geometry and physics may "attain the principles of civil philosophy, by the analytical method".⁴⁷ In line with this, in the introduction of *Leviathan* Hobbes refers to the saying "Nosce teipsum, Read thy self". This saying was meant:

to teach us, that for the similitude of the thoughts, and Passions of one man, to the thoughts, and Passions of another, whosever looketh into himself, and considereth what he doth, when he does think, opine, reason, hope, feare, &c, and upon what grounds; he shall thereby read and know, what are the thoughts, and Passions of all other men, upon the like occasions. I say the similitude of Passions, which are the same in all men, desire, feare, hope, &c; not the similitude of the objects of the passions, which are the things desired, feared, hoped, &c: for these the constitution individuall, and particular education do so vary [...].⁴⁸

Through self-examination and introspection we can study the human passions that are the same for all men. We all have the fear of death and the hope to make material profit or to experience pleasure. Therefore, the anthropological axioms can be gained by an analytical method. At the end of the introduction, Hobbes even claims in respect to the method of self-observation and self-analysis: "For this kind of Doctrine, admitteth no other Demonstration".⁴⁹

46 Ibid., chap. 6, p. 25.

47 Ibid., chap. 6, p. 26 (Hobbes's italics).

48 Thomas Hobbes, *Leviathan*, Introduction, p. 2 (Hobbes's italics).

49 Ibid.; cf. Bernd Ludwig, "Womit muß der Anfang in der Staatsphilosophie gemacht werden? Zur Einleitung des Leviathan". In: Kersting, Wolfgang (ed.), *Thomas Hobbes, Leviathan oder Stoff, Form und Gewalt eines bürgerlichen und kirchlichen Staates*, Ber-

In geometry, the mathematician deduces logically from his initial axioms and principles. In *Leviathan*, Hobbes draws persuasive political conclusions from the anthropological truths or axioms he discovered in the first part of the book in which he used both the analytic and the synthetic method.⁵⁰ He starts off drawing these conclusions in chapter 13 in which he introduces his device of a state of nature that could be interpreted as thought experiment. The state of nature is primarily a hypothetical state in which people coexist without a coercive central power. Hobbes's premises are that in such an anarchic state people have an "equality of ability", especially the *equal* ability to threaten and kill each other, and that there is a moderate scarcity of goods.⁵¹ The conclusions Hobbes draws from the state of nature are based on his knowledge about human nature. From his anthropological axioms he derives that the state of nature would be a dreadful state of constant conflicts. There are three main reasons why the human passions, appetites, and drives lead to disagreement, discord, and conflict:

So that in the human nature of man, we find three principall causes of quarrel. First, Competition; Secondly, Diffidence; Thirdly, Glory. The first, maketh men invade for gain; the second, for Safety; and the third, for Reputation.⁵²

In the state of nature there exists a moderate scarcity of goods which people desire and compete for. This competition for goods is the main reason for conflict: "And therefore if any two men desire the same thing, which nevertheless they cannot both enjoy, they become enemies; and in the way to their End [...] endeavor to destroy, or subdue one another."⁵³ Because of such violent enmities and quarrels, in an anarchic state people constantly distrust each other and feel threatened. As a consequence, they try to be more secure by accumulating power. However, this increases mutual diffidence and leads to a state of constant war and of constant fear.

lin: Akademie, 1996, pp. 55–82.

50 In the first part of *Leviathan* Hobbes does not only use the short-cut of the analytic method to gain his anthropological axioms. He also uses the synthetic method starting off with the natural causes of the senses and the imagination. From there, he follows the motions of the human mind till the succession of thoughts and thereby explains the human appetites and passions.

51 Thomas Hobbes, *Leviathan*, chap. 13, p. 63.

52 *Ibid.*, chap. 13, p. 64.

53 *Ibid.*, chap. 13, p. 63.

In chapter 13, Hobbes presents a timeless argument against anarchism. While anarchism questions the need and legitimacy of a government or a state in the name of individual liberty, in *Leviathan*, Hobbes attempts to show both that a state is necessary and that a strong government is desirable. He demonstrates that in the anarchic state of nature no one would be able to feel safe and enjoy commodious living. In the last paragraph of the chapter he shows how rational calculation leads the way to leave this state of conflict and war towards a political state of cooperation and peace:

The Passions that incline men to Peace, are Feare of Death; Desire of such things as are necessary to commodious living; and a Hope by their Industry to obtain them. And Reason suggesteth convenient Articles of Peace, upon which men have to be drawn to agreement. These Articles, are they, which otherwise are called the Lawes of Nature⁵⁴

Hobbes concludes from his anthropological axioms that the human striving for self-preservation and pleasure motivates men to leave the state of nature and to institute a sovereign power that protects everyone's life and ensures commodious living. There are three main steps and conditions under which it is beneficial for rationally calculating men to leave the state of nature and to enter a civil state. Hobbes equates these steps and conditions with the first three "Lawes of Nature" that are "found out by Reason".⁵⁵ First, for him "it is a precept, or general rule of Reason, *That every man, ought to endeavor Peace, as farre as he has hope of obtaining it*".⁵⁶ If there is hope for peace and under the condition that others are willing to do the same, men should secondly lay down their right to all things necessary for their defense and enter with others into a civil state that allows for less liberty than the state of nature. People enter into a civil state through the legalist fiction of a social contract or "Covenant of every man with every man".⁵⁷ As a consequence, the third law of nature reads: "*That men performe their Covenants made*".⁵⁸

In this paper, it is not necessary to analyze all the details and difficulties of these steps and of the further steps through which Hobbes derives the necessity of instituting a "Sovereigne Power" that unites legislative,

54 *Ibid.*, chap. 13, p. 66.

55 *Ibid.*, chap. 14, p. 66.

56 *Ibid.*, chap. 14, p. 67 (italics by Hobbes).

57 *Ibid.*, chap. 17, p. 89.

58 *Ibid.*, chap. 15, p. 74 (italics by Hobbes).

executive, judicial, and ecclesiastical power.⁵⁹ It has become sufficiently clear that in *Leviathan*, starting from chapter 13, Hobbes uses the synthetic method to compose the political body. Hobbes claims to derive his political philosophy step by step through logically compelling deductions. In each of these steps he derives consequences and effects from known causes that ultimately follow from his anthropological truths. He first breaks down the political body into its elements, the individuals, and then moves on to divide the individual into its smallest elements which are its desires, drives, and appetites. From there, he moves on step by step in order to compose a political body and to justify a sovereign with absolute power using the synthetic method. Evidently, Hobbes combines an analytic with a synthetic method. This combination constitutes a central feature of his practical philosophy.

4. Conclusion

Hobbes accuses all his predecessors of having suffered from a lack of method and definitions. However, the section on Aristotle's practical philosophy and its methods has demonstrated that this critique is not justified.⁶⁰ To be sure, Aristotle's model for practical philosophy is not geometry with its claim of being on the whole a precise, rigorous, and deductive science. However, in several of his works Aristotle reflects on scientific definitions. Definitions also play a crucial role in his practical philosophy and the way he develops his teachings. They are not only an important starting point but a result of his research. Aristotle defines man as an animal that is by nature political and – similar to Hobbes – as a living being who possesses reason and speech. These definitions of man constitute the center of his political anthropology on which his human function argument is based, from which Aristotle develops his core definition of human flourishing as “activity of the soul in accordance with virtue”. In the later books of the *Nicomachean Ethics* he gives general and particular definitions of the different ethical and intellectual virtues. The general definition for the ethical virtues states that they are a mean between two extremes, between excess and deficiency (*EN* II. 5, 1106 a 28ff.). The particular definition of courage, for example, delineates this virtue as a mean between rashness and cowardice (*EN* II. 7, 1107a 33–b 4). In the *Politics*, Aristotle gives definitions of constitutions and their subspecies that are a crucial part of his theory of constitutions. These observations suffice to demonstrate that Hobbes's accusation that Aristotle's philosophy suffers from a lack of definitions is not justified.

⁵⁹ *Ibid.*, chap. 17, p. 90 (italics by Hobbes); cf. chap. 18 and 42.

⁶⁰ It would be easy to show that Hobbes's critique is also inappropriate for the works of Aristotle's theoretical philosophy.

The role Aristotle's political anthropology plays in his human function argument already illustrates that, like Hobbes, he starts off with anthropological truths or axioms from which he derives conclusions. These conclusions are not only ethical conclusions about the definition of a good, happy, and virtuous life. They are also political conclusions about the end or purpose of the polis. As has already been mentioned, the *Nicomachean Ethics* and the *Politics* are a philosophical unity. For Aristotle, the polis serves as a means to allow free humans to develop and realize their human nature and to achieve human flourishing as their highest good.

In his more empirical Books IV–VI of the *Politics*, Aristotle even makes statements about human nature that resemble the anthropology of Hobbes and Machiavelli. For Aristotle, people generally strive for material gain and honor; according to his judgment “the many are more desirous of profit than of honor” (*Pol.* V. 4, 1318 b 16–17).⁶¹ People are greedy and want to attain more material goods and honors than they deserve. Like Plato, Aristotle holds the common human drive to have more and more – *pleonexia* – to be morally reprehensible. Aristotle uses such truths about human nature to analyze politics. Several of his explanations of the causes of revolutions are based on his insights about human nature. About political uprisings, for example, he points out: “The motives for making them are the desire of profit and honor, or the fear of dishonor and loss” (*Pol.* V. 2, 1302 a 31ff.).

To sum up, despite Hobbes's fierce critique of Aristotle, their main approaches to practical philosophy are far less different than this critique suggests. To be sure, while Aristotle is critical of Plato's anti-empirical and “mathematical approach” to practical philosophy, Hobbes strives for a method that proceeds in the manner of geometry. However, contrary to Plato, as practical scientists both Aristotle and Hobbes value experience. In particular, both base their practical philosophy mainly on experiences and definitions about human nature that they view as a natural fact. Therefore, Bernard Williams has criticized Aristotle for moving from natural fact to ethical value and thus for committing the fallacy of deriving ought from is.⁶² Because of the similarities

⁶¹ For Hobbes, people generally compete for honor and glory (Thomas Hobbes, *Leviathan*, chap. 8, 11 and 13, p. 35, 50 and 64); cf. Manuel Knoll, “Wissenschaft und Methode bei Machiavelli”.

⁶² Bernard Williams, *Ethics and the limits of philosophy*, Cambridge/Mass.: CUP, 1985; Bernard Williams, “Hylozoism”. In: *Oxford Studies in Ancient Philosophy*, 4/1986, pp. 188–99. Martha Nussbaum reinterpreted Aristotle's human nature project in order to show that Williams's criticism is not valid: Martha Nussbaum, “Ar-

of Aristotle's and Hobbes's human nature projects Williams's critique could be extended to Hobbes as well. However, it is not easy to assess whether such a critique is really as devastating for political philosophers as most contemporary philosophers think. The move from human nature to ethical or political conclusions, crucial for Plato's and Machiavelli's political thought as well, is quite common in the field. Therefore, it would certainly be desirable if future research in political philosophy would focus on clearing up questions concerning the relation of human nature and ethical and political values.

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FELSEFEDE MANTIKSAL TEMELLENDİRME YOLUYLA KAVRAMA YÖNTEMİ: *REDUCTIO AD ABSURDUM* İLE *NOESIS*

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Özet

Felsefenin ne olduğunu belirlemek için felsefe tarihinde yapılan felsefe etkinliklerinin ürünlerine bakmak gerekir. Bu da felsefe aşında felsefe uygulamasıdır demeye gelir. Felsefe tarihine baktığımızda felsefe soruşturmasının yöntemi olarak düşünme yöntemlerini, yani mantığı görürüz. Bunun dışında kavramların içeriklerinin belirlenmesi de bu mantıksal yöntemlere eşlik eder. Felsefi soruşturmada amaç hem soruşturulan nesneyi ikeden hareketle açık kılmaktır hem de bu ilkelerin kendilerini soruşturmak. Burada, felsefe tarihinden seçtiğimiz örnekler üzerinden bu düşünme yöntemlerini, ya da bir şeyin doğasını ve bir kavramın neliğini belirleme yöntemlerini sunmak istiyorum. Bunu da felsefe ile felsefe yönteminin özdeşliğini göstererek yapmak niyetindeyim.

Anahar Sözcükler: Bilgi, doğruluk, epistemoloji, felsefe, mantık, yöntem.

Abstract

It is necessary to look at the results of philosophical activities performed in the history of philosophy. It means that philosophy and philosophical practice is the same. If we look through the history of philosophy, we can see the methods of thinking, namely logic. And also, the processes of determining the contents of the concepts go along with logical methods. The aim of the philosophical inquiry is both to clarify the object on the basis of its principle and to inquire these principles themselves. In this paper, I want to present these methods of thinking, or the methods of determining the nature of anything and the whatness of a concept through discussed examples from the history of philosophy. And I intend to do this by proposing identity of the philosophical method and philosophy.

Keywords: Epistemology, knowledge, logic, method, philosophy, truth.