



Kant's Science of the Moral World and Moral Objectivity

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Kant's Science of the Moral World and Moral Objectivity

A dissertation presented
by

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To
The Department of Philosophy

in partial fulfillment of the requirements for the degree of
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in the subject of Philosophy

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Kant's Science of the Moral World and Moral Objectivity

Abstract

Critics of Kant's moral philosophy often object that it cannot account for moral requirements that are both genuinely objective and contentful. Notwithstanding the long history of this dispute, Kantians have been unable to put these objections to rest. I argue that we can answer these objections and fully understand Kantian moral objectivity only if we consider Kant's moral philosophy in light of his methodological and architectonic concerns.

My dissertation takes up this task by providing a new account of Kant's conception of moral theory *as a philosophical science*: Kant's moral philosophy, I argue, appropriates the central features of the then revolutionary method of Newtonian natural science for the investigation of practical cognition. Just as Newtonian science begins with *a priori* (largely mathematical) principles and then gradually "comes down to" particular concrete physics, so too Kantian moral philosophy begins with general *a priori* moral principles that then gradually translate into a system of particular requirements. The objectivity of the content of our practical thought develops as the background conditions of moral deliberation become progressively more inter-subjectively justifiable. This progress is possible only through co-deliberation and collective action demanded by the duty to make morality fully efficacious in our shared social world, that is, the duty to promote the highest good.

My account highlights the attractiveness of Kant's conception of the relationship between *a priori* and empirical aspects of practical thought, between theory and practice, and enables its systematic defense against objections by later German Idealists, particularly by Hegel. I argue that Hegel's polemic against Kant's account of morality is fundamentally a disagreement about the nature of philosophical science and its method, and adjudicating between their views requires adjudicating the methodological dispute itself. I offer a systematic assessment of the methodological grounds of Hegel's approach and of his critique of Kant's moral philosophy. I argue that (1) Hegel's approach does not, on the whole, present a viable alternative to Kant's moral theory and (2) Hegel's challenge can be met, but only by appealing to developmental or genetic aspects of Kant's conception of moral objectivity grounded in his views on the proper method and form of a philosophical science. I show that these aspects of Kant's thought, generally overlooked by commentators and Kantian theorists, are indispensable to his moral theory and provide a basis for a fruitful engagement with contemporary issues in moral philosophy, such as questions about the nature and role of imperfect duties.

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To my sons Aleksandr and Benjamin
for their love and encouragement,

and to my grandfather Mark for his inspiring humanism and enlightened spirit,
I was, I am, I will be Your Friend

Note on Citations

Works by Kant

Page references to Kant's *Critique of Pure Reason* use the numbers of the first 1781 (A) and second 1787 (B) editions. All references to Kant's other major writings and lectures are given by abbreviated title (listed below) and by the page numbers of the appropriate volume of Kant's *gesammelte Schriften*, edited by *Königlich Preussische akademie der Wissenschaften* (29 vols. Berlin: de Gruyter, 1902—). Citations of Kant's other works give, without abbreviated title, the volume and page from this edition.

- A *Anthropology From a Pragmatic Point of View*, trans. Mary J. Gregor, Martinus Hijhoff.
- G *Groundwork for the Metaphysics of Morals*, trans. Mary J. Gregor.
- IUH *Idea for a Universal History With a Cosmopolitan Purpose*, trans. Allen W. Wood.
- JL *Jasche Logic*, trans. J. Michael Young.
- KpV *Critique of Practical Reason*, trans. Mary J. Gregor.
- KrV *Critique of Pure Reason*, trans. Paul Guyer and Allen W. Wood.
- KU *Critique of the Power of Judgment*, trans. Paul Guyer and Eric Matthews.
- MdS *Metaphysics of Morals*, trans. Mary J. Gregor.
- MFNS *Metaphysical Foundations of Natural Science*, trans. Michael Friedman.
- OP *Opus Postumum*, translated by Eckart Förster and Michael Rosen.
- P *Prolegomena to Any Future Metaphysics That Will Be Able to Come Forward as Science*, trans. Gary Hatfield.
- Rel *Religion Within the Boundaries of Mere Reason*, trans. George di Giovanni.
- TP “On the Common Saying: That May Be Correct in Theory, but it is of No Use in Practice”, trans. Mary J. Gregor.

Works by Hegel

Hegel's works are cited by either page or, section (§) or paragraph (§§) number; Hegel's remarks (Anmerkungen) to his sections are cited by an accompanying 'R' (e.g. EL §140R); Hegel's additions (Zusätze) with an 'A' (e.g. EN §140A). Where there are multiple additions to a single section a number is placed after the 'A' (e.g. EL §136 A2). Hegel's works are abbreviated as follows:

EG *Philosophy of Mind: Being Part Three of the Encyclopaedia of the Philosophical Sciences (1830), Together with the Zusätze*, trans. William Wallace and A. V. Miller. Cited by section (§) number, unless stated.

EL *The Encyclopaedia Logic (1830), with the Zusätze: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. Theodore F. Geraets, W. A. Suchting, and H. S. Harris. Cited by section (§) number, unless stated.

EN *Philosophy of Nature: Being Part Two of the Encyclopaedia of the Philosophical Sciences, 1830*, trans. A.V. Miller. Cited by section (§) number, unless stated.

LHP *Lectures on the History of Philosophy*, trans. E.S. Haldane.

PhG *The Phenomenology of Spirit*, trans. A.V. Miller. Cited by paragraph (§§) number, unless stated.

PhR *The Philosophy of Right*, trans. Allen W. Wood. Cited by section (§) number, unless stated.

SL *Science of Logic*, trans. A.V. Miller.

Works by Goethe

Goethe's works are abbreviated as follows:

GOS *Goethe on Science: A Selection of Goethe's Writings*. Selected and introduced by Jeremy Naydler.

GSS *Scientific Studies, Goethe: The Collected Works*. Vol. 12, trans. Douglas Miller.

Introduction

It is common to refer to Kant's re-conception of the relationship between the mind and its objects – the idea that objects must conform to our cognition rather than our cognition to objects – as the “Copernican revolution” in philosophy. Indeed, the Copernican analogy usefully summarizes the fundamental shift in philosophical thinking (both theoretical and practical) initiated by Kant's critical project. But Kant's approach can be equally well described as a Newtonian transformation – the transformation of philosophy into pure rational science that is systematic and secure in its results. Kant's call for this transformation conveys a sense of urgency – putting metaphysics “on the secure path of science”¹ is a matter of preventing “the euthanasia of pure reason”, “the death of a healthy philosophy” threatened by the antinomic standstill between skepticism and dogmatism.² The leading thought of this dissertation is that, for Kant, restoring philosophy to its rightful place among the sciences requires a new philosophical procedure that adapts central features of Newton's new method in natural science for philosophical use, and that we have much to gain from thinking about Kant's project in this way. As we shall see, these Newtonian influences have important implications for the systematic structure of Kant's critical thought in general, and for the method and form of his practical philosophy, in particular.

In the first two chapters I argue that Kant's critical method has the key characteristics of the Newtonian approach. In chapter 1, I consider what motivates Kant to adapt certain

¹ (KrV bvii).

² (KrV A407/B434).

features of Newtonian methodology to philosophy and show that this methodology gives Kant's philosophical science a distinctly Newtonian shape. In chapter 2, I turn to Kant's practical thought. I argue that just as Newtonian science begins with *a priori* (largely mathematical) principles and then gradually "comes down to" particular concrete physics, so too Kantian moral philosophy begins with the idea of a moral law and general *a priori* moral principles that then gradually translate into a system of particular requirements. Moreover, on Kant's interpretation of Newtonian physics, the laws of motion are conditions that first determine an objectively valid (or empirically significant) concept of *true* vs. *relative* motion. Together with the law of gravity, they make possible the constructive procedure for approximation of the privileged frame of reference corresponding to the idea of absolute space with respect to which true motions can be fully specified. I show that Kant takes an analogous path in practical philosophy. The moral law first determines the concept of *the good* and gives meaning to the distinction between absolute and relative good. It also grounds the duty to work towards practical approximation of the ideal of the *highest good* – an ideal world in which the complete morality of its members (moral good) is the ground of their complete happiness (natural good) – as the complete object of pure practical reason. This duty assumes only an indeterminate concept of this object and demands both its gradual approximative articulation and construction through humanity's collective activity through history.³

³ Having outlined this account, I was encouraged to find a similar idea in the philosophical program hinted at by Michael Friedman in his recent response to the commentators on his book *Dynamics of Reason*. Friedman calls it Kant's extraordinary achievement to have fashioned within the historical context of the late eighteenth century Enlightenment "a profound synthesis of mathematical science and practical reason that takes our human perspective on the surface of the earth to be the necessary starting point—and, in a sense, also the necessary endpoint—of both enterprises. Just as Kant viewed the Newtonian conception of "absolute space" as the infinitely distant ideal limit of a process of mathematical-physical construction beginning from our parochial perspective on the surface of the earth and extending successively outwards through the solar system, the Milky Way galaxy, and so on ad infinitum, he similarly viewed the highest

This account suggests a new perspective on Kant's conception of moral objectivity that emphasizes its developmental or genetic aspects, which I defend in the later part of the dissertation.

While my primary interest in this project is Kant's mature moral theory – its method, justificatory strategy, and the role it affords to the ideal of the highest good, I devote two full chapters to a discussion of Hegel's method and his ethical system. This calls for some explanation. Over its long history, Hegel's (and Hegelian) critique has pressed Kant's moral philosophy in ways which I believe have been beneficial for deeper understanding and further development of both Kantian and Hegelian practical thought. At the same time, the perennial philosophical dispute between Kant and Hegel seems to have entered a stage of a frozen conflict – while active combat is for the most part over, no satisfactory resolution is in view. My primary intention in considering Hegel's rich and complicated polemic against Kant is to use it as an exploratory device that may help us better understand and adequately address possible weaknesses or gaps in Kant's moral theory. But, as we shall see, reflecting on the nature of Hegel's philosophical procedure also sheds new light on the shape and plausibility of his ethical theory, and, if my argument is correct, allows us to make some progress towards adjudicating the long-standing Kant vs. Hegel dispute.

On the one hand, Kant and Hegel have much in common when it comes to recognizing the need for a thorough self-examination and self-authentication of reason.

end of morality as the infinitely distant ideal state of affairs in which the Kingdom of Ends is actually put into effect on this same earthly surface. This, in fact, is precisely what he appears to have in mind in the famous passage from the Conclusion of the *Critique of Practical Reason* (1788), where Kant speaks of “the starry heavens above me and the moral law within me.”(Michael Friedman, “Reconsidering the dynamics of reason: Response to Ferrari, Mormann, Nordmann, and Uebel” in *Studies in History and Philosophy of Science*, 2011, p.6).

Both philosophers believe it is crucial for the survival of philosophy that it become science – secure self-knowledge of reason able to withstand skeptical attacks. Both think that the principal aim of practical philosophy, in particular, is to demonstrate that morality is not an alien imposition on us as persons with individual needs, desires, and aspirations, but is essential to our nature.⁴

On the other hand, once we have Kant's methodological Newtonianism firmly in view, it becomes clear that Hegel's critique often targets precisely the Newtonian features of Kant's moral theory that are supposed to ensure its status as a science of morals. This gives rise to a number of natural questions: What is it that Hegel finds objectionable in Kant's Newton-inspired conception of philosophy as science and its method? How is Hegel's conception of philosophical science different from that of Kant? Most importantly: How philosophically appealing is this conception, especially in comparison to Kant's view?

Answering these questions requires examination of Hegel's own methodological ideas. Consideration of Hegel's ethical theory and his critique of Kant's moral philosophy in light of these views shows that his polemic against Kant's moral theory is fundamentally a disagreement about the nature of philosophical science and its method.

While Kant's approach can be described as broadly Newtonian, Hegel's notion of

⁴ Other, and related, continuities between Kant's and Hegel's thought have also been recently noted. Kenneth Westphal argues, for example, that "Hegel ... follows Kant's key strategy for determining legitimate normative principles by pursuing the Critical question, To what principles are we committed by even the most elementary free outward actions? Most importantly, like Kant, Hegel insists that only those practical principles are legitimate for which sufficient justifying reasons can be given to all parties affected by actions based on and guided by those principles. A consequence of this requirement is that reason is the ultimate and sole source of normative authority; no independent or external sources of authority can be taken as justificatory premises for normative principles, because any justification based on them can only appeal to those parties who antecedently accept those premises. This is central to the normative autonomy of reason." (Kenneth Westphal, "Kant, Hegel, and Determining Our Duties" in D. Knowles, ed., *G. W. F. Hegel* series: edited by T. Campbell, pp.337–338)

philosophical science shares key features of Goethe's conception of properly scientific investigation. Thus in chapter 3, I argue that we can obtain a better grasp on how these conceptions clash by considering Goethe's strident opposition to Newtonianism, which Hegel clearly shares. To this end, I examine Goethe's objections against the Newtonian method in natural science (particularly against its employment in optics) as well as his positive views on the nature of scientific inquiry.

In chapter 4, I connect Goethe's methodological views to Hegel's conception of philosophical science in general and, in chapter 5, I argue that Hegel's philosophical science of right in particular has the key features of Goethean science. If correct, my argument shows that Hegel's criticism of Kant is motivated to a large extent by the same set of methodological concerns that motivate Goethe's attack on Newtonianism in natural science and connects this critique to Hegel's rejection of Kant's critical method.

I then offer a systematic assessment of Hegel's positive account of ethics in light of his methodological commitments and argue that Hegel's approach does not, on the whole, result in a viable alternative to Kant's moral theory. At the same time, consideration of Hegel's critique of Kant against the background of their deep methodological disagreement shows that a comprehensive Kantian response must both acknowledge this disagreement and bring to the fore the attractiveness of Kant's approach. On the view I propose, Hegel's challenge can be met, but only by appealing to developmental aspects of Kant's conception of moral objectivity grounded in his views on the proper method and form of a philosophical science. Thus, both the account of Kant's method as "broadly Newtonian" discussed in the first two chapters and analysis of Hegel's "broadly Goethean" approach in chapter 5 provide the impetus for a new

perspective on Kant's account of moral objectivity, which is the focus of the last chapter (chapter 6) of this dissertation.

On the view I defend, the objectivity of the content of our practical thought develops as the background conditions of moral deliberation become progressively more intersubjectively justifiable. This progress is possible only through co-deliberation and collective action demanded by the duty to make morality fully efficacious in our shared social world, that is, the duty to promote "the highest good". Many Kantians dismiss Kant's claim that we have this duty as incompatible with the core of his moral philosophy. This dismissal, I argue, raises doubts about Kant's ability to justify the moral law, yet it is a mistake. We have this duty in virtue of our genuine and necessary concern for the outcomes of our moral actions, and we must see the ideal at which it aims as practically possible in order to think of ourselves as effective moral agents. Simply put, a duty to promote the highest good is a duty to strive to bring about a truly moral world in which happiness falls to the virtuous as a result of the efforts of the virtuous. This is an end that no one person can try to achieve on her own and that cannot be brought about through the uncoordinated, separate efforts of the many. Rather, we have to work together to bring this moral world ever closer to reality. On this view, while we know what is *right* to do simply by reasoning under the categorical imperative, we come to know what is morally *best* to do only asymptotically through the collective deliberation and action of humanity through history.

The duty to promote the highest good is a collective duty gradually to develop social structures and institutions that embody and administer shared moral laws, making general

a priori moral duties (particularly the imperfect duties of virtue) progressively more determinate through practice; perfecting them, as it were.

If my argument succeeds, it shows that developmental aspects of Kant's moral thought, generally overlooked by commentators and Kantian theorists, are indispensable to his moral theory and provides a basis for a fruitful engagement with contemporary issues in moral philosophy, such as questions about the nature and role of imperfect duties. In particular, it promises a new perspective on contemporary questions about the shape and demandingness of the duty of beneficence, for it involves gradually specifying a *shared conception* of what the duty of beneficence requires of each individual and of the community collectively in particular cases.

Chapter 1

Kant's Conception of Philosophical Science and Newtonian Methodology

In the preface to the second edition of the *Critique of Pure Reason*, Kant describes the *Critique* as a “treatise on the method” that for the first time makes metaphysics possible *as a science* through investigation of reason’s entire structure and use. This method, he notes, is modeled on the new method of natural science that, especially in the form of Newtonian natural philosophy, has met with such brilliant success in ordering and predicting, and in providing a unified mathematical description of, natural phenomena. Kant attributes this success to the revolutionary change in the way natural scientists approached the study of nature – with the idea that nature is answerable to the *a priori* principles of the human mind.⁵ It is here, in the preface, that Kant compares the change in the ways of thinking in philosophy initiated by the critique to the Copernican transformation in astronomy.⁶ In theoretical philosophy, this change is based on the supposition that “objects must conform to our cognition” rather than our cognition to objects; that our reason is the source of norms (principles and conditions) through which and under which alone we can represent, and have knowledge of, the objective world.⁷ In practical philosophy, the critique introduces a parallel revolutionary shift from attempting to derive moral requirements from the antecedently defined concept *the good* (the object

⁵ “[P]hysics owes the advantageous revolution in its way of thinking to the inspiration that what reason would not be able to know of itself and has to learn from nature, it has to seek in the latter...in accordance with what reason itself puts into nature.”(KrV bxiii-xiv)

⁶ See (KrV bxvi).

⁷ For a helpful discussion of Kant’s “Copernican” revolution in philosophy see Henry Allison, *Kant’s Transcendental Idealism*, chapter 2.

of the will) to grounding our conception and knowledge of *the good* in the fundamental principle of pure practical reason.⁸

Newton transformed the study of physical nature into *science* – a unified system of knowledge based on fundamental laws – and, at the same time, proved the truth of Copernicus’s theory. Copernican heliocentrism, initially only a hypothesis, was finally and definitively established through the argument for the law of universal gravitation in *Philosophiae Naturalis Principia Mathematica* – the work that exemplified Newton’s new method in natural philosophy. The example of Newtonian natural science leads Kant to believe that adapting its methods to the investigation of reason itself (at least, “so far as the analogy which, as species of rational knowledge, they bear to metaphysics may permit”)⁹ will result in an analogously beneficial outcome. As he stresses in the preface to the *Critique of Pure Reason*, the new philosophical method promises to *prove* the truth of the Copernican transformation in philosophy and, at the same time, to establish metaphysics as *pure rational science*.¹⁰ Indeed, the *Critique* can be described as a treatise on method precisely because it aims to show that the methodological transformation Kant has in mind is not only capable of obtaining a systematically unified body of philosophical knowledge, but is the only way to obtain it.

Kant’s prefatory remarks provide a clue to the way his views on natural-scientific methodology inform his conception of the proper *philosophical method* and of *philosophy as science*. In the present chapter, I follow this clue to the conclusion that

⁸ In the *Critique of Practical Reason*, Kant famously argues that the concept of *the good* can be determined only after the moral law is established and by means of it. See (KpV 5:62).

⁹ (KrV bxxv–xvi).

¹⁰ (KrV bxxii fn).

Kant's critical method has the key characteristics of the Newtonian approach and examine what this means for the form of Kant's theoretical philosophy. The argument of this chapter also lays out the framework for a new perspective on the structure of Kant's practical philosophy and its justificatory strategy and helps to frame the account of Kant's moral objectivity I develop later in the dissertation.

I proceed as follows. In section 1, I consider why Kant thinks that certain features of Newtonian methodology must be adopted by philosophy. This requires reflection on what these features are and on Newton's own motivation behind them. I argue that this methodology leads to a theory that has what I call a Newtonian "form of science". By this "form of science" I understand a stratified system of knowledge generally comprising three fundamental levels: a level that contains *a priori* or formal principles and concepts, an "applied" level at which principles of the theory are applied to empirical concepts and experiential phenomena, and a level that mediates or co-ordinates between them.

In section 2, I turn to Kant's approach in theoretical philosophy, making explicit Newtonian features of Kant's critical method and the form it gives to his metaphysics in general. In his reflections on Kant's legacy, Hermann von Helmholtz remarks that, unlike speculative systems of *Naturephilosophie* of Schelling and Hegel, Kant's philosophy stands "together with the natural scientists on precisely the same fundamental principles".¹¹ Insofar as this characterization is true of Kant, it is true of his critical method and applies, in my view, beyond its use in theoretical philosophy. In the chapter that follows, I will show what this means for Kant's practical thought.

¹¹See Hermann von Helmholtz's address *Über das Sehen des Menschen* at the dedication of Kant's memorial in Königsberg in 1855, and also his 1862 Heidelberg lecture "On the Relation of Natural Science to General Science."

1. Kant's critical method and the Newtonian revolution in natural science

1.1

In the articles written for Diderot's *Encyclopédie* published in the 1750s, French mathematician and philosopher Jean d'Alembert praises Bacon and Descartes for introducing "the spirit of experimental physics" into natural philosophy. But he credits Newton in particular with bringing about a great revolution in science by finally giving natural philosophy a "proper scientific form":

"Newton appeared, and was the first to show what his predecessors had only glimpsed, the art of introducing Mathematics [*géométrie*] into Physics and of creating – by uniting experiments and calculation – an exact, profound, brilliant and new science. At least as great for his experiments in optics as for his system of the world, Newton opened on all sides an immense and certain pathway".¹²

Kant would certainly agree with this assessment. Even his pre-critical writings show deep appreciation of the new method of natural science epitomized in Newton's work, which compels Kant to look for ways to imitate it in philosophy. By the time of the *Prize Essay (The Inquiry Concerning the Distinctness of the Principles of Natural Theology and Morality* of 1764), Kant argues that in order to attain a highest degree of certainty, stability, and systematicity metaphysics must adopt a method that parallels, or imitates, that of Newton:

"If the method for attaining the highest possible degree of certainty in this type of cognition has been established, and if the nature of this kind of conviction has been properly understood, then the following effect will be produced: the endless instability of opinions and scholarly sects will be replaced by **an immutable rule** which will govern deductive method and **unite reflective minds in a single effort**. It was **in this way that, in natural science, Newton's method transformed the chaos of physical hypotheses into a secure procedure based on experience and geometry.**" (AK 2:275, my emphasis).

¹² Jean d'Alembert, "*Expérimental.*" quoted in I. Bernard Cohen, *The Newtonian Revolution with Illustrations of the Transformation of Scientific Ideas*, p.45.

“The true method of metaphysics is basically the same as that introduced by Newton into natural science and which has been of such benefit to it. Newton’s method maintains that one ought, on the basis of certain experience and, if need be, with the help of geometry, to seek out rules in accordance with which certain phenomena of nature occur.” (AK 2:286, my emphasis)

Although during the critical turn Kant’s thinking about the proper philosophical method significantly evolves, it continues to be deeply influenced by the Newtonian model. Indeed, the *Critique of Pure Reason* both clarifies the basic features of the new scientific approach that are worth modeling in philosophy and puts them to actual use. One reason for this continuity is Kant’s persistent and ever so firm belief that metaphysics is facing a problem analogous to that confronted by Newton. The parallel is reasonably clear. Prior to Newton, the study of physical nature resembled a battlefield of rival hypotheses with no shared criteria against which theories could be systematically and rigorously evaluated; no certain way to weed out false theories and to secure those that are true. With the help of his new method Newton (in his works on optics and especially in the *Principia*) for the first time was able to establish a *shared conceptual framework* of formally (mathematically) specified fundamental principles within which questions can be determinately formulated and definitively answered by reasoning from experiments and observations. This enabled natural scientists to unite in a collective effort, as it were, to develop physical science based on a single and firmly established set of *a priori* principles specifying the parameters of their inquiry.

Kant sees this revolutionary achievement stand in stark contrast to the desperate condition of philosophy. Even in his pre-critical *Dreams of the Spirit Seer* (1766), he considers metaphysics to be inhabited by the “dreamers of reason”, like Wolff and

Crusius, who “build castles in the sky in their various imaginary worlds”.¹³ In the *Critique*, Kant proclaims that metaphysics – this former “queen of the sciences” – finds itself in a Hobbesian state of nature, mired in endless controversies and “mock combats”, “in which no participant has ever yet succeeded in gaining even so much as an inch of territory”.¹⁴ In this state, it is *in principle* unable to secure its assertions or make any progress at all. What it needs is *a way* to attain a firm philosophical consensus on a set of fundamental principles and criteria – the overall plan and rules of the game, as it were – that can serve as an immutable basis for development of metaphysics as a unified and absolutely certain system of philosophical knowledge. The received philosophical methods have failed miserably and require a radical reform. The concern of the *Critique* consists precisely in an “attempt to transform the accepted procedure of metaphysics, undertaking an entire revolution according to the example of **the geometers and natural scientists**”.¹⁵

For Kant, their example suggests the “Copernican” idea that we can cognize of things *a priori* only what our reason itself puts into them. And before metaphysical investigation (as a science of pure reason) can commence, we must know *what* pure reason *can* legitimately put into objects. This means that metaphysics can be placed on “a secure path of science” – it can become an *apodictically* (absolutely and incontestably) *certain and complete system of pure rational knowledge* – only if it is based on a prior

¹³ See *Dreams of a Spirit-Seer Elucidated by Dreams of Metaphysics* (AK 2:342). Kant’s own early “dream” is that once the philosophers awakened from their slumber, “they will all inhabit a common world together at the same time, **such as mathematicians have long possessed.**” And, he adds, “**this important event is now imminent, if we are able to believe certain signs and portents which made their appearances some while ago above the horizon of the sciences.**”(AK 2:342, my emphasis)

¹⁴ (KrV bxv).

¹⁵ (KrV bxxi).

self-investigation of reason. The critique examines the fundamental structure and proper use of our cognitive faculty, establishing what Kant calls “the form of a whole of cognition”.¹⁶ This form is to serve as the complete plan, specifying the overall structure and the building blocks, for the construction of the *science* of metaphysics.¹⁷

To achieve this, Kant claims, the *Critique* would do well to imitate a new way of thinking that first made natural science possible:

“The examples of mathematics and natural science...seem to me sufficiently remarkable to suggest our **considering what may have been the essential features in the changed point of view by which they have so greatly benefited. Their success should incline us...to **imitate their procedure**, so far as the analogy which, as species of rational knowledge, they bear to metaphysics may permit...
*This method, *imitated from the method of those who study nature*, thus consists in this: **to seek the elements of pure reason in that which admits of confirmation or refutation by experiment.**”**(KrV bxvi–xviii, b xviii fn, my emphasis)

What exactly this means is not immediately clear. What kind of experiment is Kant talking about? More importantly, what is it about the method of the geometers and natural scientists that is worthy of imitating in philosophy? Kant’s claim seems especially puzzling in light of his well-known distinction between mathematical and philosophical methods and his arguments, in the Doctrine of Method of the first *Critique*, in particular, that “mathematics and philosophy are two entirely different things ..., so that the procedure of the one *can never be imitated by that of the other*”.¹⁸ To answer these questions we first have to look more closely at the Newtonian method and its relation to geometrical problem solving.

1.2

¹⁶ (KrV A645/B673).

¹⁷ As Kant stresses in the *Prolegomena*, “*Critique*, therefore, and critique alone contains in itself the whole *well-proved* and *well-tested* plan, and even all the means required to establish metaphysics as a science; by other ways and means it is impossible.” (P 4:365)

¹⁸ (KrV A726/B754, my emphasis).

Like many of his contemporaries, Kant considers Newton's work in general, and *Principia* in particular, the best exemplification of the revolutionary transformation of natural philosophy into genuine science – systematically ordered, based on universal and necessary principles, and secure in its results. Newton's new methodology enables this transformation by bringing together an “empiricist” method of Baconian experimentalism and a “rationalist” tradition of mathematizing science inherited from the mathematical sciences of classical antiquity (e.g., harmonics, optics, statics, and astronomy).¹⁹

Kant takes the work of the new natural science in general to be guided by the revolutionary idea, partly occasioned and partly stimulated by “the suggestion of the ingenious Francis Bacon”, that:

“Reason, in order to be taught by nature, must approach nature **with its principles in one hand**, according to which alone the agreement among appearances can count as laws, and, **in the other hand, the experiments thought out in accordance with these principles** – yet in order to be instructed by nature **not like a pupil...**, but **like an appointed judge who compels witnesses to answer the questions he puts to them.**” (KrV bxii-bxiii, my emphasis)²⁰

That is, experimental science can comprehend nature as rationally-ordered and law-governed system *only if* it structures its observations and experiments in terms that appeal to a set of categories and principles that are neither abstracted from experience nor simply posited, but rather issue from our reason itself.

One of the central elements of Baconian experimental approach is the idea of a ‘*crucial instance*’ able to disprove all but one theory. In *Novum Organum*, Bacon, who was first widely to apply juridical categories to scientific inquiry, spoke of “torturing” or

¹⁹ See, for example, Thomas S. Kuhn, “Mathematical vs. Experimental Tradition in the Development of Physical Science” in *The Journal of Interdisciplinary History*, Vol. 7, No. 1 (Summer, 1976), pp. 1-31.

²⁰ In the first edition of the *Critique of Pure Reason*, Kant compares the *Critique* itself to “a *tribunal* which will assure to reason its lawful claims, and dismiss all groundless pretensions, *not by despotic decrees, but in accordance with its own eternal and unalterable laws*”. (KrV axi-xii)

“interrogating nature” through experiments analogous to judicial trials in which nature is put on the witness stand and compelled to answer examiners’ questions. The term *Experimentum Crucis* itself was coined by Robert Boyle²¹ and famously used by Newton in his early work on optics.²²

It is worth noting some peculiarities of Newton’s take on the virtues of such an experiment. While Baconian experimental scientists thought of *Experimentum Crucis* primarily as a way definitively to rule out false theories or hypotheses, Newton also stressed an affirmative, and, under relevant conditions, even *demonstrative* value of certain crucial experiments. Thus, given that an experiment is conducted under the suppositions that all competing theories share, if only one of them is able to account for the phenomena under investigation, then this theory can be considered adequately experimentally confirmed (at least until a better alternative is proposed and tested). Newton’s appeal to *Experimentum Crucis* in his optical works, in particular, emphasized the idea that an experiment can establish a theory as *true* if this theory derives from an existential claim that the experiment *proves* by *producing* evidence, or perhaps, better put, if the existential claim established through the experiment can derive only from the theory in question. For example, the claim that *there are* kinds of light that have different refrangibility, which Newton argued his prism experiment *proved* by *producing* instances of the differently refrangible kinds of light and *exhibiting* their difference of refrangibility, was taken to establish the truth of his “science of color”.²³ The

²¹ See Brian Vickers, “Francis Bacon and the Progress of Knowledge”, p.511.

²² Newton used this term to describe his proof that white light is composed of colored or differently refrangible light in the *New Theory about Light and Colour*.

²³ For a detailed analysis of Newton’s use of crucial experiments, see Howard Stein’s “Further Considerations on Newton’s Methods”, pp. 17-20. Consider also Dennis L. Sepper’s description of

fundamental principles of a theory were seen as direct expressions of *facts* or “deeds” of nature revealed in the experiment. This is one of the features of Newton’s approach that, I will later argue, is central to Kant’s own proof of the claim that *there is* pure practical reason and to the deduction of freedom in the *Critique of Practical Reason*.

Newton’s use of crucial experiments is closely related to the mathematization (or *formalization*) of science. In setting up his experiments, Newton seeks well-chosen phenomena that can be mathematically (geometrically) described. On the one hand, on Newton’s kinematic, or mechanical view of geometry, geometric objects (straight lines, plane curves, and other figures) are conceived as mechanically generated. On the other, mechanical constructions (produced by “God, nature, or any technician”²⁴) are viewed as the subject matter of geometry. Arguably, for Newton, this means that like a geometer who through geometrical analysis of a curve satisfying certain given conditions is able to deduce a tracing mechanism that generates it (analysis), a natural scientist can deduce a causal agent, a force, that produces the phenomena so described (for example, deduce forces from the trajectories of motion, such as elliptical trajectories of planets described by Kepler’s area law). Similarly, he thinks of geometrical synthesis – deduction of curves from tracing mechanisms in constructive geometry – as structurally analogous to the deduction of phenomena from forces in mathematical natural philosophy. This analogy between geometrical analysis/synthesis and Newton’s “deduction” of forces from

Newton’s crucial experiment in optics in *Goethe contra Newton*: “the evidence not only agrees with the prediction of his ray theory but gives ocular proof of the existence of the various kinds of ray. But now we have moved to a *different sense of cruciality*: The experiment reveals, immediately and without suspicion of doubt, the essence of the theory – that is precisely what makes it a theory rather than a hypothesis. Thus the crucial experiment seems no longer in need of a context other than itself. The theory becomes a matter of fact, because it is the direct expression of an experiment.” (p.165, my emphasis)

²⁴ See, *The Mathematical Papers of Isaac Newton*, D.T. Whiteside, Vol. 7, p 289. Quoted in Niccolò Guicciardini, *Isaac Newton on Mathematical Certainty and Method*, p. 319 fn.

phenomena/phenomena from forces is the basis on which he claims to give certainty and universality to his physical theory.²⁵ This is why, it is plausible to say that Newton's mathematization (or *formalization*), of science implies the possibility of *crucial experiments*. As James Garrison puts it, "Repetitions of an experiment were no more necessary for Newton than repetitions of a geometrical configuration would be for the geometrician."²⁶ The framework of mathematically specified fundamental laws, discovered through analysis, can then serve as a system of criteria against which theories can be tested. This approach is supposed to provide for the highest degree of *certainty* possible for the theory that satisfies these criteria and ensure universality, or *lawfulness*, of the particular principles it contains.

1.3

Generally speaking, the method of the Newtonian experimental science is a method of *analysis followed by synthesis* – an approach based on the moderns' late sixteenth century re-discovery of the ancient Greek method of geometric problem solving and its novel application to problems of natural science.²⁷ In proving theorems and constructing solutions to geometrical problems, Greek mathematicians proceeded by analysis of geometric configurations followed by a synthetic demonstration or construction of figures

²⁵ Here I benefit from Niccolò Guicciardini's very helpful discussion in *Isaac Newton on Mathematical Certainty and Method*, pp.315-327.

²⁶ James Garrison, "Newton and the Relation of Mathematics to Natural Philosophy" in *Journal of the History of Ideas*, Vol. 48, No. 4, 1987.

²⁷ The so-called "Port-Royal" logic (*La Logique ou l'Art de Penser*) by Arnauld and Nicole, first published in 1662, associates this two-stage procedure specifically with scientific method, describing synthesis as "what is commonly done in the sciences, where, after having used analysis to find some truth, we employ the other method [of synthesis or composition] **for explaining** what is found" (P-RL, p.238, my emphasis).

based on the properties and relations discovered through analysis.²⁸ The synthetic step served as a rigorous proof that a figure with required properties can *actually* be constructed (by reversing the series of steps identified in analysis and gradually constructing the figure from its elements) and, thereby, as a confirmation that analysis was correct and complete. Many early-moderns saw it as one of their highest priorities to extract from the newly translated Greek texts (particularly from Pappus’s fragmentary *Collectio Mathematica*, containing the methodological discussion of the *Treasury of Analysis*, first printed in 1588) the hidden key to ancient methods.²⁹ Impressed by Pappus’s description of the analytic procedure, a number of mathematicians, including François Viète, John Wallis, and René Descartes, came to believe that ancient geometers³⁰ purposefully concealed their true method (especially its analytic component) behind the Euclidian axiomatic-deductive style – a synthetic presentation and demonstration in terms of axioms, postulates and definitions.³¹ The whole procedure of analysis followed by synthesis was thought of as *a kind of analysis* (call it “Analysis”) in

²⁸ This method is associated in particular with the Alexandrian mathematician Pappus and his contributions to the so-called “Treasury of Analysis”, a collection of doctrines by post-Aristotleian Greek mathematicians. Pappus gives a particularly clear statement of the method of analysis followed by synthesis: “[I]n analysis we suppose that which is sought to be already done, and we inquire from what it results, and again what is the antecedent of the latter, until we on our backward way light upon something already known and being first in order. And we call such a method analysis, as being a solution backwards. In synthesis, on the other, we suppose that which was reached last in analysis to be already done, and arranging in their natural order as consequents the former antecedents and linking them one with another, we in the end arrive at the construction of the thing sought. And this we call synthesis” (Pappus, vol vii, quoted in Jakko Hintikka and Unto Remes, *The Method of Analysis, Its Geometrical Origin and Its General Significance*, pp.8-9).

²⁹ See, e.g. Niccolò Guicciardini, *Isaac Newton on Mathematical Certainty and Method*, pp.33-34; H.J.M. Bos, *Redefining Geometrical Exactness*.

³⁰ In addition to Euclid, Pappus also mentions Apollonius of Perga and Aristaeus the Elder as geometers who used the method of analysis followed by synthesis.

³¹ See, for example, Descartes’ *Rules for the Direction of the Mind*, pp.376-7. Arguably, Newton’s analytic ‘method of fluxions’ (developed in *De Methodis* and in *De Quadratura*) is similarly obscured by a synthetic presentation style of this method in the *Principia*.

contrast to the *mere synthesis* previously associated with Euclidean geometry. I note this here because the idea that a synthetic style of presentation is able to obscure the analysis that lies behind (or within) it is relevant to the account I want to give of Kant's method in the first and second *Critiques*.

Here is how Newton, a known admirer of Greek geometry, describes his own experimental method in *Opticks*³², assimilating the method of analysis followed by synthesis into the *experimental* natural philosophy:

“As in Mathematicks, so in Natural Philosophy, the Investigation of difficult Things by the **Method of Analysis ought ever to precede the Method of Composition**. This analysis consists in **making experiments and observations, and in drawing general conclusions from them...For Hypotheses are not to be regarded in experimental Philosophy...**By this way of Analysis we may proceed from Compounds to Ingredients, and from Motions to the Forces producing them; and in general, from Effects to their Causes, and from particular Causes to more general ones, till the Argument end in the most general. This is the Method of Analysis: And the Synthesis consists in assuming the Causes discover'd and establish'd as Principles, and by them **explaining the Phænomena proceeding from them, and proving the Explanations.**” (*Opticks*, Book III.380, my emphasis)

In the 17th and 18th centuries analysis, sometimes referred to as the “method of discovery”, acquires a number of different meanings, but is generally thought as “ascending” from something individual or particular to the ever more general (and, ultimately, universal) or from the whole to its constitutive parts and basic ingredients. The analysis culminates with the fundamental elements, concepts and principles. In their influential study of the method of analysis, Jakko Hintikka and Unto Remes argue that the mathematical (geometrical) analysis Newton has in mind is best understood as “a systematic study of the *interdependencies* of the geometrical objects in a given

³² Based on the auction list of Kant's library in 1804, Kant owned a 1719 edition of Newton's *Opticks*. He was also clearly well-familiar with its contents. See, e.g., *Immanuel Kant Bücher: Bibliographien und Studien*, Vol. 3, ed. M. Breslauer, Berlin, 1922, p. 35.

configuration.”³³ Newton extends this idea to natural philosophy by representing an experimental setup as a kind of “analytical situation” and thinking of analysis as a general method of studying physical configurations. Hintikka and Remes explain it this way:

“[W]hat is happening in a typical controlled experiment is a study of what depends on what in it – and hopefully also **precisely what mathematical relationships these dependencies exemplify**. Newton’s conception of **experimental method as a kind of analysis** is thus an outgrowth of the idea of analysis as an analysis of figures or more generally geometrical configurations. Newton was trying to analyze an experimental situation in the same way as a Greek geometer like Pappus was trying to analyze a figure in the sense of **trying to establish the interrelations of its several parts**.” (*The Method of Analysis*, p.106, my emphasis)

As “analytical situations”, Newton’s experiments strip out various contingent factors and isolate dependencies between those properties of objects that appear to hold under *any possible* experimental conditions. Newton is looking for experiments that make possible a precise formal treatment of these dependencies – expressing them as mathematical (*a priori*) relations between measurable quantities – and allow the scientific researcher to reveal, as it were, the underlying mathematical structure of the theory in the phenomena themselves (e.g., the mathematically describable correlation between refrangibility of light and color, in *Opticks*). His analysis separates purely formal (or *a priori*) from contingent elements present in experience, determining their properties, and establishing relations between various known (and controllable) and unknown (uncontrollable) factors, expressing the unknown in terms of the known and mathematically quantifiable (e.g. forces in terms of motions). This way, we may say, Newtonian analysis establishes the formalized framework of a physical science that enables further experiments through which Nature itself can *definitively answer* questions

³³ Jakko Hintikka and Unto Remes, *The Method of Analysis, Its Geometrical Origin and Its General Significance*, in *Boston Studies in the Philosophy of Science*, ed. Robert S. Cohen and Marx W. Wartofsky, Vol. XXV, p.106.

(determinately formulated in the language of the framework) as opposed to answers being first conjectured by its examiners.

Synthesis is characterized as a movement in the direction opposite to analysis – “descending” from causes to their effects, from axioms or fundamental principles to particulars, and from the component parts to their combination in the whole. At this stage, various phenomena are explained and unified through the laws and principles discovered through analysis, and the substantive, experimentally testable content of the theory is ‘constructed’ or ‘deduced’. In Book I, part 2 of *Opticks*, for example, Newton proceeds “[b]y the discovered Properties of Light to explain... the Colours made by Prisms” (proposition 8), “the Rain-bow” (proposition 9), “the permanent Colours of Natural Bodies” (proposition 10), and, finally, “By mixing coloured Lights to compound a beam of Light of the same Colour and Nature with a beam of the Sun’s direct Light.”

For Newton, the synthetic step often involves putting together new, complex theoretical configurations based on laws discovered through analysis and testing the ability of the resulting theory to answer previously unresolved questions. The synthetic stage of the inquiry shows how the principles derived within the theory (e.g., the universal law of gravitation in the *Principia*) *explain* the phenomena that follow from these principles (e.g., implications of the law of universal gravitation for the trajectories of planets and comets), and ‘*proves*’ these explanations by evidence obtained through experiments and observations. This, in turn, not only confirms the validity of the principles derived within the theory (in a sense, completing their ‘deduction’ from the phenomena), but also provides a *warrant* for the basic “constitutive” framework of the

theory (e.g.. the underlying theory of space and time, and the laws of motion).^{34 35} This way, the synthetic stage aims to demonstrate consistency of the theory and completeness of its basic framework, at least until new evidence requires revisions. This makes the theory as a whole *thoroughly systematic* and it is synthesis that ensures *systematicity* of Newtonian natural science.

This conception of science as *a system*, therefore, implies a need for what may be called ‘*comprehensive*’ justification – the principles (e.g., both fundamental laws of motion and laws that are derived with their help) are first ‘deduced’ from phenomena; these principles then serve as a basis for deduction of further claims about phenomena to be tested, or ‘proved’, in experience, which, in turn, provides a warrant for the system as a whole. As we shall see, Kant recognizes this connection between synthesis and systematicity. Indeed, the idea that science requires what I called ‘comprehensive justification’ is particularly important for Kant’s critique of metaphysics, since he

³⁴ Newton’s use of the term “deduction” seems to reflect Baconian influences, since it appears to have much more in common with the juridical usage concerning right (also generally associated with Kant) than with its ordinary logical usage found in the work of Descartes, among others. As Howard Stein points out, for example, ““deduction” – is used by [Newton] in a quite wide sense, for reasoning competent to establish a conclusion as warranted (in general, on the basis of available evidence).” (“From the Phenomena of Motions to the Forces of Nature”: Hypothesis or Deduction?” Proceedings of the Biennial Meeting of the Philosophy of Science Association, Volume Two: Symposia and Invited Papers, 1990, p.219).

³⁵ See, e.g., Howard Stein’s conclusion in “From the Phenomena of Motions to the Forces of Nature”: Hypothesis or Deduction?”: “[T]he deduction from the phenomena in Book III can be regarded as not only a deduction of the law of universal gravitation, but also a deduction – or at any rate a contribution of evidence; a “proof” in Newton’s sense – of a major metaphysical element of Newton’s science: his theory of space and time. But one can say more than this. For clearly, in so far as the “deduction” validates what I have called Newton’s speculative application of the third law of motion, it also contributes evidence for the cogency of the general conception of the natural powers that lies behind that application: that is, as I would put it, it “proves,” besides the metaphysics of space and time, the general metaphysics of nature expressed in the introductory sections of the *Principia* and in the preface to the first edition. I believe that this whole conception of the constitutional frame of nature was actually developed by Newton at the same time that he was discovering the law of gravitation. In other words, as I see the situation, not only the “proof,” but the discovery itself, of the background theory that made possible Newton’s reasoning from the phenomena to the force of gravitation, occurred simultaneously and marched hand-in-hand with the latter.” (p.221)

conceives metaphysics as a fully autonomous system of pure reason that cannot appeal to anything outside itself to certify the validity of its principles.

1.4

Newton's methodological demand that in science analysis must precede synthesis is closely related to his rejection of the so-called *method of hypotheses* – starting with substantive hypotheses based on *a priori* speculation and then arguing for their validity by marshalling empirical support for their consequences, that is, by foregoing analysis and *descending* from hypotheses to the phenomena. Rather, Newton insists that fundamental principles be “deduced from the phenomena,” by first *ascending* through mathematical argumentation from experiments (systematic analysis of the interdependencies of elements of experimental situations), such as a crucial experiment in *Opticks* or experimental situations involving moving bodies in the *Principia*.

In the celebrated General Scholium to the *Principia*, Newton proclaims: “*Hypotheses non fingo.*” – I do not feign hypotheses – “For **whatever is not deduced from the phenomena**, is to be called an *hypothesis*; and hypotheses whether metaphysical, or physical, or of occult qualities, or mechanical, have no place in *experimental philosophy.*”³⁶ The structure of the *Principia* reflects Newton's recognition that the exceptional complexity and multifaceted nature of orbital motions and other physical phenomena allows them to satisfy a number of mutually incompatible hypotheses without a feasible way of choosing between them. His way of arriving at *uniquely determinate*

³⁶ See *Philosophiæ Naturalis Principia Mathematica*, 3rd ed. with variant readings, ed. Alexandre Koyré and I. Bernard Cohen, Cambridge, Mass.: Harvard University Press, 1972, vol. II, p. 764, my emphasis. See also *Opticks*, Query 28, “[T]he main Business of natural Philosophy is **to argue from Phænomena without feigning Hypotheses, and to deduce Causes from Effects**, till we come **to the very first Cause...**” (*Opticks*, Dover ed., p. 369, my emphasis).

answers is to proceed by analysis followed by synthesis. It is first to lay out a formal mathematical framework (e.g., the calculus of infinite limiting processes and instantaneous rates of change, framed by his concepts of space, time, motion, etc.) and to formulate the fundamental axioms, or laws, of motion (themselves deduced from phenomena) in a way that was maximally purified of empirical content, so as to establish the principles that structure the experiments through which nature itself could answer disputed questions.³⁷ Only after this basic framework is in place, by applying its apparatus to phenomena broadly understood (empirical data and empirical rules that describe the data, such as Kepler's laws), does Newton give a "deduction" of the law of universal gravitation, and of its consequences.³⁸

The requirement that in natural science analysis must precede synthesis, with its concomitant prohibition against "feigning hypotheses", is motivated by the epistemological demand for *certainty* and *systematicity*. That is, on the one hand, it

³⁷ Among many questions Newton's *Principia* poses to nature within the framework of its principles and which now for the first time science was able definitively to answer were such questions as what physical force holds the planets in their orbits around the sun, what are the true rather than merely apparent motions of the planets, as well as a famous and a closely related question of whether the *Copernican* heliocentric or the *Tychonic* "geoheliostatic" system correctly describes celestial motions. For Kant these questions represent aspects of the *crucial experiment* with which Reason approaches nature.

³⁸ Consider Newton's description of his method in the *Principia*: "Mathematics requires an investigation of those quantities of forces and their proportions that follow from **any conditions that may be supposed**. Then, coming down to physics, these proportions must be compared with the phenomena, so that it may be found out which conditions of forces apply to each kind of attracting bodies. And then, finally, it will be possible to argue **more securely** concerning the physical species, physical causes, and physical proportions of these forces." (*Principia Mathematica*, B1.11; Cohen and Whitman, p.588) In the preface of the first edition of the *Principia*, Newton also describes the general structure of the work as follows: "[W]e offer this work as mathematical principles of philosophy. For all the difficulty of philosophy seems to consist in this—from the phenomena of motions to investigate the forces of Nature, and then from these forces to demonstrate the other phenomena. It is to these ends that the general propositions in books 1 and 2 are directed, while in book 3 our explication of the system of the world illustrates these propositions. For in book 3, by means of propositions demonstrated mathematically in books 1 and 2, we derive from celestial phenomena the gravitational forces by which bodies tend toward the sun and toward the individual planets. Then the motions of the planets, the comets, the moon, and the sea are deduced from these forces by propositions that are also mathematical..." (*Principia*, p.382).

springs from the demand to know nature, its laws and its objects, as they are in truth, without being influenced by opinions and prejudices. On the other hand, it is motivated by the need for our knowledge of nature to be self-consistent and unified. For many moderns (and certainly for Kant) this means that our knowledge of nature must be based on the secure foundation of firmly-established fundamental laws and be able progressively to develop towards the ideal of a complete science.

1.5

Now, a scientific investigation that follows this approach gives the resulting theory a particular shape. Call it a Newtonian “form of science”. In broad outline, a theory that has this form is a stratified system of knowledge with three basic levels.³⁹ First, we have a framework of purely formal principles, such as propositions of mathematics and logic, as well as *nominal* definitions of key concepts – definitions that merely distinguish them from other terms and do not say anything about the essential nature of an object of a concept being defined or its possibility in experience. In Newtonian natural science, these include, for example, nominally defined concepts of quantity of matter, quantity of motion, and the absolute, accelerative, and motive measures of forces.

At the next level, there is a set of *a priori* principles which function as what Hans Reichenbach called *coordinating principles* or *axioms of coordination*⁴⁰ – between the purely formal representations of the first level and the empirical content (objects, events, and activities) to which it is intended to apply. These principles define the “rules of the

³⁹ In my thinking about a Newtonian “form of science”, I have greatly benefited from the work of Michael Friedman, especially his discussion in *Dynamics of Reason*.

⁴⁰ See, for example, Hans Reichenbach, *The Theory of Relativity and A Priori Knowledge*, 1920. See also *The Philosophy of Space and Time*, 1928, pp.14-19. Here, I am using this term merely to indicate the *coordinative* and *constitutive* function of these principles. I do not want to imply that, for Newton (or for Kant), these are in any sense conventional, as they are for Reichenbach.

game”, so to speak, for a given domain of inquiry, fixing the objective meanings of formal concepts and principles by interpreting them in concrete terms and constituting the way we go about asking and answering questions, or solving problems, within this domain. As Michael Friedman convincingly argues, in Newtonian physics, the laws of motion serve as such coordinating principles – they establish a correspondence between abstract mathematical theories and representations (infinite Euclidian space, uniformly traversed straight lines, etc.) and concrete empirical phenomena to which these representations are to be applied (such as observable relative motions in the solar system or Kepler’s laws).

Finally, at the third level there are particular substantive elements of the theory (particular empirical laws, such as laws of fluid mechanics, for example) whose objective meaning and normative force are made possible by the constitutive framework specified in the other two strata.

Newton’s method naturally leads to a theory that has this form of science because it aims to create a framework for scientific inquiry with exactly the characteristics that this form embodies. The formal and coordinating levels allow for definitive comparisons and selection among competing theories which the method seeks, as well as for “deductions” of further force laws by synthetic application of the axioms of coordination to phenomena and for subsequent adjustments and tuning of various parts of the substantive level of the theory. The formal and coordinating levels also determine the highest degree of certainty a science can achieve.⁴¹

⁴¹ For Newton’s natural science, this certainty is always “physical certainty” of experimental evidence. Kant, however, not only thinks that the science of metaphysics, as a system of *a priori* knowledge from concepts, must be absolutely certain, but also that the intelligibility of natural science as a system of objective knowledge of nature requires it to have an absolutely certain grounding. In the Preface to the

So far, I have considered some key aspects of Newtonian methodology that helped to transform natural philosophy into a science – a body of knowledge and a way of thinking that is secure, systematic and based on a framework of fundamental laws and *a priori* mathematical principles. For Kant, the question is how a similar transformation can be brought about in philosophy. How can metaphysics be transformed into a science – a secure and thoroughly unified system of knowledge based on a framework of *a priori* laws of reason?

In what follows I consider the way in which Newtonian methodology provides a model for Kant's answer to this question.

2. Kant's critical method is "broadly Newtonian"

2.1

When in his pre-critical *Prize Essay* Kant insists on modeling philosophical methodology on the Newtonian method in natural science, he points to a need of analysis to precede synthesis in philosophical investigation. At this stage, he thinks of analysis and synthesis as *analysis* and *synthesis of concepts*. During the critical turn Kant re-thinks and expands his conception of philosophical method, but the *Essay* already provides some insight about the direction in which his thought is to evolve. It already indicates, for example, what Kant is *not* looking for in a method fitting the distinctive nature of philosophical

Metaphysical Foundations, *science proper* is described as a thoroughly systematic doctrine ordered according to *a priori* principles. The concept of science, Kant argues, implies that its judgments and principles, including particular empirical laws insofar as they are considered *laws* (and not mere generalizations), carry with them *universality* and *necessity*. The fundamental principles on which science proper is based cannot, therefore, be empirical – that would make all explanations and justification of scientific claims contingent. Rather, the principles that ground science proper must be *a priori* principles of "*rational connection of cognitions into a whole.*" In virtue of their own rational necessity, such grounding principles ensure objective certainty of all other scientific cognitions that stand under them (MFNS 4:468). This pure part is necessary precisely because, in Kant's view, only it can ground objectivity and lawfulness of natural explanations and justifications.

investigation by distinguishing the method of metaphysics from the *synthetic* “mathematical method”⁴² of arguing from axioms, postulates, and definitions to their consequences – a distinction that remains very important for critical Kant.

Unlike mathematics, whose cognitions are *intuitive* – based on constructions of concepts by exhibiting objects of these concepts in pure intuition (as Kant puts it, *in concreto*), philosophical cognitions are *only discursive* – representations of objects through mere concepts (*in abstracto*). Mathematicians, says Kant, *make* their concepts by means of synthetic definitions – *rules* for constructing these concepts in pure intuition.

He offers the following example:

“[T]hink arbitrarily of four straight lines bounding a plane surface so that the opposite sides are not parallel to each other. Let this figure be called a *trapezium*. The concept which I am defining is not given prior to the definition itself; on the contrary, it only comes into existence as a result of that definition.... In this and in all other cases the definition obviously comes into being **as a result of synthesis.**” (AK 2:276, my emphasis)

Philosophy, however, cannot be grounded on intuitively certain propositions, synthetic definitions and *in concreto* proofs by means of visible signs or constructions of figures, akin to mathematical demonstrations.⁴³ Philosophical concepts, such as

⁴² For the *Prize Essay*'s comparison of mathematical and philosophical cognition, see 2:278-289. Kant develops this line of thought further in the *Critique of Pure Reason* (KrV A722/BB750 – A727/B755), the *Prolegomena* (P 266; 272) and the Introduction to *Jäsche Logic* (9:23), for example. His criticism in the *Prize Essay* seems to target Christian Wolff in particular, Wolff gives an explicit argument for the philosophical use of the mathematical method in *Philosophia Rationalis sive Logica*, §139. Another famous proponent of this form of philosophical presentation is, of course, Spinoza (*Ethica Ordine Geometrico Demonstrate*).

⁴³ Consider what Kant means by an *in concreto* proof or demonstration of geometry: “In geometry, in order, for example, to discover the properties of all circles, one circle is drawn; and in this one circle, instead of drawing all the possible lines which could intersect each other within it, two lines only are drawn. The relations which hold between these two lines are proved; and the universal rule, which governs the relations holding between intersecting lines in all circles whatever, is considered in these two lines *in concreto*.” (AK 2:278). Philosophical proofs, on the other hand, are solely discursive, or “acromatic” This is because, “neither figures nor visible signs are capable of expressing either the thoughts or the relations which hold between them. Nor can abstract reflection be replaced by the transposition of signs in accordance with rules.... The universal must rather be considered *in abstracto*.” (AK 2:279)

substance, cause, time, freedom, etc. are always “*given*” *a priori* in pure understanding itself (not constructed in intuition), even if “confusedly or in an insufficiently determinate manner”.⁴⁴ As Kant explains in his lectures on Logic (*Vienna Logic*, of early 1780s), to say that a concept is “given” (either *a priori* through the nature of our understanding or *a posteriori* through experience, the latter being something like a Lockean simple idea, e.g., “water is a fluid body”) is to say that it does not arise from our faculty of choice.⁴⁵ We cannot choose what basic philosophical concepts we have, yet, we can construct or *make* geometrical concepts by defining them according to our choice – “I want to think a figure, says the mathematician, that looks so and so, and it to be called such and such”⁴⁶ or, in the case of *a posteriori made* concepts, choose to extend an *a posteriori given* concept of water further through experiments and observations that identify its chemical properties, for example.

Because their concepts are *given*, philosophers can only clarify and make these concepts more determinate *by means of analysis* (through comparison, reflection, and abstraction). Kant illustrates this with an example of the concept of time:

“[E]veryone has a concept of time. But suppose that that concept has to be defined. The idea of time has to be examined in all kinds of relation if its characteristic marks are to be **discovered by means of analysis**: different characteristic marks which have been **abstracted** have to be **combined together** to see whether they yield an adequate concept; they **have to be collated with each other** to see whether one characteristic mark does not partly include another within itself. If, in this case, I had tried to arrive at a definition of time synthetically, it would have to have been a happy coincidence indeed if the concept, thus reached synthetically, had been exactly

⁴⁴ “In philosophy, the concept of a thing is always given, albeit confusedly or in an insufficiently determinate fashion. The concept has to be analyzed; the characteristic marks which have been separated out and concept which has been given have to be compared with each other in all kinds of contexts; and this abstract thought must be rendered complete and determinate. (AK 2:276)

⁴⁵ (AK 24:914).

⁴⁶ (AK 24:915).

the same as that which completely expressed the idea of time which is given to us.”
(AK 2:277, my emphasis)

Given the nature of philosophical concepts and method, definitions are nearly always the last thing philosophers come to know.⁴⁷ Indeed, Kant declares that “**the first and the most important rule**” that governs philosophical investigation is that “one ought not to start with definitions, unless that is, one is merely seeking a **nominal definition**, such as, for example, the definition: that of which the opposite is impossible is necessary”.⁴⁸ This is because to start with definitions that are not merely nominal is to feign hypotheses and, thereby, to deny philosophy a secure foundation.

In the *Essay*, Kant thinks of philosophers as arriving at their definitions in two stages. They, first, separate out and clarify the characteristic marks of their concepts, and second, determine the relation between these marks, identifying those relations that hold *in all possible contexts*. As Kant stresses in the (Vienna) *Logic* lectures, given that, in practice, analysis is often incomplete, its *completeness* “requires a proof” – “I must first show that the marks lie in the concept, and then show that taken together they constitute the concept”.⁴⁹ Although this “proof” consists in putting together previously separated elements, and in this sense is synthetic, it is still part of the overall analytic procedure – what with respect to the ancient Greek method of geometrical problem solving I called

⁴⁷ See (AK 2:276). As Kant puts it in the Logic lectures (*Vienna*), “**To make a distinct concept is the synthetic method, to make a concept distinct is the analytic one.**.....With analytic cognition I make a given concept distinct. Synthetic cognition gives me the concept simultaneously with distinctness. The *mathematicus* makes concepts with distinctness. The philosopher makes concepts distinct. ...In the synthetic [act] I add new marks to the concept of an object through experience. It arises in such a way that the parts of the cognition precede the whole cognition. In the analytic [act] the whole precedes the parts. E.g., I cannot explain virtue synthetically. For I am supposed to say what we all think under the concept of virtue, not what I perhaps understand under this concept in accordance with my own caprice.”(AK 24:845)

⁴⁸ (AK 2:285).

⁴⁹ (AK 24:917).

the “Analysis”. Thus, in suggesting that philosophical method must be modeled on that of Newton’s, Kant emphasizes that the synthetic stage of metaphysics proper requires a prior stage of philosophical analysis analogous to Newtonian (and ancient Greek) analysis of configurations.

Only after the analytic stage is complete can metaphysics be constructed *synthetically* by taking the results of analysis (or rather “Analysis”) as its basis. Metaphysics, Kant writes, “has a long way to go yet before it can proceed synthetically. It will only be when analysis has helped us towards concepts which are understood distinctly and in detail that it will be possible for synthesis to subsume compound cognitions under the simplest cognition, as happens in mathematics.”⁵⁰ We can see then that even at this early stage, the Newtonian requirement that analysis must precede synthesis is the key methodological principle that Kant wants to adapt to philosophical investigation.

This principle retains its importance in Kant’s critical philosophy, even as he clarifies and develops his views on *what kind of analysis* is required to provide metaphysics with a complete and secure foundation. Prompted by Hume’s investigation of the principle of causality, Kant comes to recognize that the fundamental activity of the mind is *synthetic* and that metaphysics is a body of synthetic *a priori* judgments. Such judgments can be *sought out* and *clarified* by conceptual analysis, but this analysis cannot *justify* the synthetic use of *a priori* concepts; that is, it cannot justify the possibility of *a priori* cognition of objects. Proving the possibility of metaphysics and putting it on a secure foundation, Kant realizes, requires a different kind of analysis. It requires analysis of the synthetic *activity* of the mind – analysis of our cognitive faculty itself, of its

⁵⁰ (AK 2:290).

elements, principles and the limits of their use. In other words, it requires a critique of reason.⁵¹ To borrow Kant's phrase in the *Groundwork of the Metaphysics of Morals*, because he is concerned to justify synthetic propositions *a priori*, he “would have to **go beyond cognition of objects to a critique of the subject**”.⁵² This critique is necessary before metaphysics can proceed with its own tasks (developing the metaphysical bases of physical science, for example) in a systematic manner.

In what follows I argue that Kant's critical method is deeply influenced by Newtonian methodology. Indeed, it can be regarded as broadly Newtonian insofar as it has three (related) features that give Kant's philosophical system the Newtonian ‘form of science’: (i) the idea that reason itself can be subject to experiments, and, in particular, subject to ‘crucial’ or ‘decisive’ experiments, (ii) the rejection of the method of hypotheses – starting by positing substantive metaphysical claims, and (iii) a concomitant requirement that the philosophical investigation of pure reason (establishing its basic structure and the limits of its use) and development of the science of metaphysics are to proceed by analysis followed by synthesis. I will consider these features one at a time, starting with the idea of a ‘crucial’ experiment on reason.

2.2

⁵¹ In the *Prolegomena*, Kant makes it particularly clear why he rejects the idea that metaphysics can be advanced through mere conceptual analysis: “[I]n order to prevent all misconception, we must remember ...– that by the analytic treatment of our concepts the understanding gains indeed a great deal, but the science (of metaphysics) is thereby not in the least advanced because these analyzes of concepts are nothing but the materials from which the intention is to carpenter our science. Let the concepts of substance and of accident be ever so well analyzed and determined; all this is very well as a preparation for some future use. But if we cannot prove that in all which exists the substance endures and only the accidents vary, our science is not the least advanced by all our analyzes. Metaphysics has hitherto never been able to prove *a priori* either this proposition or that of sufficient reason, still less any more complex theorem such as belongs to psychology or cosmology, or indeed any synthetic proposition. By all its analyzing, therefore, nothing is affected, nothing obtained or forwarded, and the science, after all this bustle and noise, still remains as it was in the days of Aristotle...” (P 4:368)

⁵² (G 4:440, my emphasis).

For Newton, the construction of a scientific theory (through analysis followed by synthesis) both begins with and is confirmed by experiments and observations. If Kant's critical method is to be plausibly described as having the key features of the Newtonian scientific methodology, the self-examination of reason must also have an "experimental" aspect. Indeed, Kant does compare the critique to a tribunal and claims that it is engaged in certain kinds of trials and decisive experiments. He connects the latter, in particular, with the antinomies of pure reason – the four sets of *prima facie* opposing, yet equally convincing, dialectical arguments concerning the limits and the constitution of the world, the existence of freedom and of the absolutely necessary being.

It is well-known that Kant viewed his discovery of the antinomies as a pivotal moment in the genesis of critical philosophy and "the most beneficial error into which human reason could ever have fallen".⁵³ In the letter to Christian Garve (Sept., 1798), Kant writes that it is in fact this discovery that drove him to the critique of reason itself.⁵⁴ The antinomies exposed the "scandal of ostensible contradiction of reason with itself." This scandal had to be removed in order not only to provide secure rational grounding for scientific and philosophical knowledge, but also to preserve and defend the validity of ordinary moral beliefs.

But, there seems to be another reason why the discovery of the antinomies stimulated the critical turn. For Kant, they were not only crucial problems that needed solving, but also *crucial experiments* on reason itself, analogous to crucial experiments in natural science. Compare this discovery to David Hume's announcement at the outset of a *Treatise of Human Nature* that moral philosophy (and philosophy of the human mind in

⁵³ (KpV 5:107).

⁵⁴ See, *Correspondence*, Sept 21, 1798 (AK 12:258).

general) is at a disadvantage, for unlike natural philosophy, “in collecting its experiments, it cannot make them purposely, with premeditation, and after such a manner as to satisfy itself concerning every particular difficulty that might arise”, and, therefore, must limit itself to “a cautious observation of human life, and take them as they appear in the common course of the world, by men’s behaviour in company, in affairs, and in their pleasures.”(*Treatise*, Intro 10)

In the Preface to the second edition of the *Critique of Pure Reason*, Kant describes the antinomy as an *experiment* providing a confirmation or a check up on the altered way of thinking adopted in the *Critique* – the idea that we can have no knowledge of what things are in themselves and that things as appearances conform to our way of representing:

“This method, imitated from the method of those who study nature, thus consists in this: to seek the elements of pure reason in that **which admits of confirmation or refutation by experiment**. Now the propositions of pure reason, especially when they venture beyond all boundaries of possible experience, admit of no test by experiment with their **objects** (as in natural science): thus to experiment will be feasible only with **concepts** and **principles** which we assume *a priori* by arranging the latter so that the same objects can be considered from two different sides, **on the one side**, as objects of the senses and the understanding for experience, and **on the other side**, as objects that are merely thought at most for isolated striving beyond the bounds of experience. If we now find that there is agreement with the principle of pure reason when things are considered from this twofold standpoint, but that an unavoidable conflict of reason with itself arises with a single standpoint, then *the experiment decides for the correctness of that distinction*.”(KrV bxviii fn, my italics)⁵⁵

The antinomies represented Baconian experimental set ups – “decisive experiments”⁵⁶ – capable of ruling out transcendental realist theories (including both

⁵⁵ For a similar description of the role of the antinomies see also Kant’s Letter to Garve of August 7th, 1783 (AK 10:341fn).

⁵⁶ In the *Prolegomena*, Kant describes an antinomy as “a decisive experiment, which must necessarily expose any error lying hidden in the assumptions of reason “(P 4:340-1).

traditional rationalism and empiricism) that treat our representations of things as things in themselves. At the same time, their solution served as an indirect proof, or confirmation, of transcendental realism's sole alternative – transcendental idealism – as capable of reconciling the apparently conflicting claims of pure theoretical reason. More generally, the antinomies indicated that the experimental method of natural philosophy, which culminated in Newton's *Principia*, could be adapted to metaphysics.⁵⁷ That is, metaphysics could leave behind its “groping among mere concepts”⁵⁸ and be put on “a secure path of science” only through self-examination of reason modeled on a new way of thinking that first made natural science possible.

2.3

The crucial experiments of the antinomies (taken together) represent a kind of a completeness and consistency proof of Kant's critical investigation of the activity of pure theoretical reason and come late in the *Critique*. Reflection on the way the *Critique* appropriates the other two features of Newtonian methodology – the rejection of the method of hypotheses and the requirement that analysis must precede synthesis – brings us back to its beginning. In his critical writings Kant continues to maintain that philosophical investigation cannot begin with substantive (or real) definitions. Echoing Newton's “*Hypotheses non fingo*”, Kant announces at the outset of the first edition of the *Critique* that in this inquiry, “anything that even looks like an hypothesis is a forbidden commodity, which should not be put up for sale even at the lowest price but must be

⁵⁷ Kant also compares the antinomies with experiments of chemists. See (KrV bxxi fn).

⁵⁸ (KrV bxv).

confiscated as soon as it is discovered.”⁵⁹ The self-investigation of reason must begin with a “transcendental critique” – a kind of analysis – that establishes the basis for the synthetic construction of “any future metaphysics that will be able to present itself as a science”.⁶⁰ The *Critique* proceeds through analysis of our cognitive faculty followed by synthetic proofs or deductions exhibiting the validity of its principles and the limits of their proper use in the Transcendental Aesthetic and Analytic, and of consistency and completeness of the system of pure reason as a whole in the Dialectic. That is, I suggest, we can think of the “transcendental critique” as proceeding by analysis followed by synthesis and, at the same time, as a kind of analysis as a whole – the “*Analysis*” (akin to the ancient Greek method of geometric problem solving) directed at solving “the general problem of pure reason”,⁶¹ that is, the problem of the possibility of synthetic *a priori* knowledge, and of the possibility of metaphysics in particular. The central tenet of Kant’s critical philosophy is that this problem must be solved before metaphysics can be developed as an actual science.

It may seem, however, that this understanding of the method of the *Critique* is at odds with Kant’s own characterization. In an often cited, but controversial, passage from the *Prolegomena to Any Future Metaphysics*, Kant draws a distinction between the “analytic” or “regressive” method of the *Prolegomena* and the “synthetic” or “progressive” approach of the *Critique of Pure Reason*.⁶² He points out that the *Critique*

⁵⁹ (KrV axv).

⁶⁰ I refer here to the subtitle of the *Prolegomena*.

⁶¹ (KrV B19).

⁶² (P 4:263). This distinction has been a source of puzzlement and disagreement among Kant scholars. For different, often opposing, accounts of the meaning Kant attaches to this distinction see, for example, Paul Guyer, *Kant and the Claims of Knowledge*, pp.6-7, Graham Bird, “Kant’s Analytic Apparatus” in A

is executed in what he calls “the *synthetic style*” because it approaches the question of possibility of the *science* of metaphysics *synthetically*:

“In the *Critique of Pure Reason* I have treated this question *synthetically*, by making inquiries into pure reason itself and endeavoring in this source to determine the elements as well as the laws of its pure use according to principles. The task is difficult and requires a resolute reader to penetrate by degrees into a system based on no data except reason itself, and which therefore seeks, without resting upon any fact, to unfold knowledge from its original germs. These *Prolegomena*, however, are designed for preparatory exercises; they are intended to point out what must be done in order to make a science actual if it is possible, rather than to expound it. They must therefore rest upon something already known as trustworthy, from which we can set out in confidence and ascend to sources as yet unknown, the discovery of which will not only explain to us what we knew but exhibit a sphere of many cognitions which all spring from the same sources. The method of such prolegomena, especially of those designed as a preparation for future metaphysics, is consequently *analytical*.” (P 4:274-275, my bold)

The *Prolegomena*, as a *preparatory* exercise, treats the general problem of the possibility of cognition from pure reason and the problem of the possibility of metaphysics as science *analytically*. It takes *as given* and *certain* the actuality of synthetic *a priori* knowledge of pure mathematics and pure physics, and *ascends* from these *data* to the fundamental concepts and principles that make synthetic *a priori* knowledge in general, and, therefore, metaphysics itself, possible. In contrast, the *Critique* gradually *builds up* the system of pure reason, *descending*, as it were, “from its original germs”,⁶³ which it *discovers* to be *given* in reason itself, to their use in synthetic *a priori* judgments. Kant seems to mean that the *Critique* puts together synthetic *a priori* cognitions (showing how they are possible), and the fundamental structure of pure reason

Companion to Kant, ed. Graham Bird, pp.134-5, and Karl Ameriks, “Kant’s Transcendental Deduction as a Regressive Argument” in *Interpreting Kant’s Critiques*, pp.51-66. For recent accounts see Melissa McBay Merritt’s “Science and the Synthetic Method of the “Critique of Pure Reason”” in *The Review of Metaphysics*, Vol. 59, No. 3 (Mar., 2006), pp. 517-539, and Gabriel Gava’s “Kant’s Synthetic and Analytic Method in the *Critique of Pure Reason* and the Distinction between Philosophical and Mathematical Syntheses” in *European Journal of Philosophy*, March 2013.

⁶³ (P 4:274-5)

as a complete system (showing how metaphysics is possible as science) from the elements that originate in our cognitive faculty itself – space and time as forms of sensibility, categories of the understanding, schemata, etc. Note, however, that the *Critique* starts out by isolating and analyzing these elements, and that it must start this way. The “original germs” of the system of pure reason must first be *discovered through analysis* of the faculty of cognition that takes no fact and no body of knowledge as its *given* starting point, but this faculty itself. Only then can these elements serve as the basis for the future science of metaphysics proper, which, as Kant tells us, is *essentially* concerned with generating synthetic *a priori* judgments out of “previously analyzed concepts” belonging to pure understanding and pure reason.⁶⁴

Kant conceives of *science* in general as a thoroughly systematic doctrine ordered according to a complete system of *a priori* (universal and necessary) principles of “*rational connection* of cognitions into a whole”.⁶⁵ These fundamental principles ensure lawfulness of all other scientific cognitions that stand under them.⁶⁶ Completeness of the basic framework of metaphysics is particularly important. Metaphysics, Kant argues, is the only science that, *if it is possible at all*, can actually be completed.⁶⁷ Indeed, this

⁶⁴ (P 4:274).

⁶⁵ In *Jäsche Logic*, in the paragraph titled *Form of Science – Method*, Kant writes: “Cognition, as science, must be arranged in accordance with a method. For science is a whole of cognition as a system, and not merely an aggregate.” The method has to deal with “the form of science in general, or with the ways of acting so as to connect the manifold of cognition in a science” and with “the way for us to attain the perfection of cognition” which includes its “distinctness, thoroughness, and systematic ordering” (JL, 139-40).

⁶⁶ See, for example, *Metaphysical Foundations of Natural Science* (MFNS 4:468).

⁶⁷ Kant writes, for example: “Now metaphysics, according to the concepts we will give of it here, is the only one of all the sciences that may promise that little but unified effort, and that indeed in a short time, will complete it in such a way that nothing remain to posterity except to adapt it in a didactic manner to its intentions, yet without being able to add to its content in the least. For it is nothing but the inventory of all we possess through pure reason, ordered systematically.” (KrV axx, my emphasis)

completeness is necessary because metaphysics is concerned with the *real* or *synthetic* use of pure reason – the use by which the categories (“the fundamental concepts of things and relations”) and *a priori* principles are “*given*” by our pure rational faculty.⁶⁸ Given the nature of metaphysics, says Kant,

“Nothing here can escape us, because what reason brings forth entirely out of itself cannot be hidden, but is brought to light by reason itself **as soon as reason’s common principle has been discovered**. The perfect unity of this kind of cognition, and the fact that it arises solely out of pure conceptions without any influence that would extend or increase it from experience or even particular intuition, which would lead to a determinate experience, make this **unconditioned completeness not only feasible but also necessary**.” (KrV a xx, my emphasis)

The possibility of metaphysics as pure rational science presupposes pure reason’s independence from anything external to itself – its autonomy with respect to its principles and concepts which form a “perfect unity” according to reason’s “common principle”.⁶⁹

In the *Prolegomena*, Kant writes, for example:

“Pure reason is a sphere so separate and self-contained that we cannot touch a part without affecting all the rest. We can therefore do nothing without first determining the position of each part and its relation to the rest. For inasmuch as our judgment cannot be corrected by anything outside of pure reason, so the validity and use of every part depends upon the relation in which it stands to all the rest within a domain of reason...” (P 4:263)⁷⁰

The *Critique* is executed in the “*synthetic style*”, Kant explains, “in order that the science may present all its articulations, as the structure of a peculiar cognitive faculty, *in their*

⁶⁸ See, for example, Inaugural Dissertation (2:393; 411) and (KrV A299/B355).

⁶⁹ See, e.g. (KrV axx). Unfortunately, Kant does not make it very clear what this “common principle” is. In the ‘metaphysical deduction’, Kant describes the table of the categories as “systematically generated from a common principle, namely the faculty for judging (which is the same as the faculty for thinking)” (KrV A80-1/B106/7). Whatever exactly Kant means by the “common principle”, it still seems plausible to claim, as he does, that since metaphysics considers objects only in relation to necessary laws of thought based on the finite set of pure concepts of the understanding or categories, it yields a finite number of cognitions. For this reason, completeness of the fundamental framework of the science of metaphysics becomes one of the central goals of the *Critique of Pure Reason*.

⁷⁰ In his view of systematicity, Kant was influenced by Georg Friedrich Meier’s conception of a systematic doctrine (*systema*). See, for example, Georg Friedrich Meier’s *Auszug aus der Vernunftlehre*, §§104-5. Kant used Meier’s abridged book on Logic as a basis for his own Logic lectures for almost forty years.

natural combination”,⁷¹ that is, I take it, as a *system* of pure reason in which “the validity and use of every part depends upon the relation in which it stands to all the rest”.⁷² In a sense, what Kant calls the “synthetic style” is a style of presentation that makes possible a kind of ‘comprehensive’ justification similar to that found in Newton’s *Principia*, or what John Rawls (at least with respect to Kant’s moral philosophy) refers to as the “coherentist” approach to justification.⁷³

In his lectures on Logic from the 1780’s, Kant draws a particularly clear connection between the *synthetic method of exposition*, or *presentation*, and *systematicity*:

“The true **method of exposition** is synthetic, however, for **even if I have thought the thing analytically, the synthetic method is what first makes it a system**. All cognitions must be systematic, however, because I cannot myself know whether I have a complete whole, for **one member in the system serves to justify the correctness of the other and to rectify it.**” (*Hechsel Logic*, 116, pp.418-419, my emphasis)

This kind of *synthetic style of presentation* alone, according to Kant, is able to fulfill the demand for systematicity, and therefore completeness, of a plan for the future construction of metaphysics.

Thus, when Kant describes the *Critique’s* approach to the problem of metaphysics as *synthetic*, he does this to emphasize two points: (i) the transcendental critique is a *self-investigation* of pure reason as an *autonomous faculty* (“a sphere... separate and self-

⁷¹ (P 4:263). In the *Critique* itself, Kant describes the transcendental deduction of the categories, for example, as a kind of exhibition of the categories as necessary conditions for the possibility of experience as determination of appearances in space and time in general where this determination ultimately follows from the original synthetic unity of apperception “as the form of understanding in relation to space and time, as original forms of sensibility” (KrV B169).

⁷² (P 4:263).

⁷³ John Rawls, *Lectures on the History of Moral Philosophy*, Harvard University Press, 2003, pp.267-268.

contained”⁷⁴), which can presuppose no *fact*, but the fact of its own activity of thought and judgment, and (ii) this self-investigation aims to establish a *complete* and *well-proved system of a priori* elements and principles (“building blocks of metaphysics...collected according to fixed principles”).⁷⁵

2.4

Nevertheless, I think the *Critique* can also be properly described as engaged in a *special kind* of analysis (the “Analysis”), which may, as perhaps was the case with the ancient Greek texts on geometry, be partially obscured by the *Critique’s* synthetic style of presentation. It is analysis in the sense which Kant gives it in his (Jäsche) *Lectures on Logic*, for example: “the method of critical philosophizing...consists in *investigating the procedure of reason itself*, in *analyzing the whole human faculty of cognition* and examining how far its limits may go”.⁷⁶

This kind of analysis must be clearly distinguished from the traditional method of rationalists, who thought that we can attain real, contentful, objective knowledge through mere analysis (or clarification) of intellectual concepts, and from Kant’s own pre-critical conception of philosophical analysis as conceptual analysis.

The “transcendental critique” is analysis of the *acts* of reason and of *interrelations* of elements within a system of reason as a whole. This is a kind of Newtonian-style analysis of interrelations that does not merely *isolate* the fundamental elements of the whole, but at the same time *establishes* (or *deduces*) a *system* of fundamental principles that specify

⁷⁴ (P 4:263).

⁷⁵ (P 4:273).

⁷⁶ (JL, 9:33, my emphasis).

their interrelations, exhibiting these elements as necessary conditions for the possibility of experience and its objects.

Kant's analysis commences with the distinction between sensibility and understanding and goes on to isolate and establish the *a priori* elements in each. Thus, the Transcendental Aesthetic (concerned with the principles of *a priori* sensibility) first isolates sensibility "by separating off everything that the understanding thinks through its concepts" so that only empirical intuition remains and then detaches from the latter "everything that belongs to sensation, so that nothing remains except pure intuition and the mere form of appearances".⁷⁷ The Metaphysical and Transcendental Expositions of space and time comprise a set of analytic arguments that ascend (or regress) from certain features of our representations taken as given to necessary conditions of these features (showing that space and time are *a priori* and intuitive).⁷⁸

Similarly, the Transcendental Analytic part of the *Critique* (concerned with *a priori* elements of the understanding) proceeds through analysis of the activity of understanding and of its role in experience:

"This Analytic is the **analysis** [*Zergliederung*] of the entirety of our *a priori* cognition into the elements of the pure cognition of the understanding.... I understand by an analytic of concepts not their analysis, or the usual procedure of philosophical investigations, that of **analyzing the content of concepts** that present themselves and bringing them to distinctness; but rather the much less frequently attempted **analysis** [*Zergliederung*] **of the faculty of understanding itself**, in order to research the possibility of *a priori* concepts by **seeking them only in the understanding as their birthplace and analyzing its pure use in general; for this**

⁷⁷ See (KrV A22/B36).

⁷⁸ For a helpful discussion of this matter see Gabriele Gava, "Kant's Synthetic and Analytic Method in the *Critique of Pure Reason* and the Distinction between Philosophical and Mathematical Synthesis", *European Journal of Philosophy*, March 2013, pp.10-11.

is the proper business of a transcendental philosophy.” (KrV A65-66/B90-91, my emphasis)⁷⁹

The work of the Analytic is to establish “the logic of truth”⁸⁰, on the basis of which metaphysics can then be built as a science.

Even the Dialectic, containing the critique of the “logic of illusion”, which leads pure reason to overstep the bounds of experience, can still be described as proceeding analytically in the same sense – it dissects the faculty of pure theoretical reason, analyzing its synthetic use, in order to investigate the limits of its validity and the possibility of its ideas and inferences.⁸¹

The analysis of our cognitive faculty allows Kant first to isolate and then to specify the relations between different elements of cognition (for example, a relation between *a priori* forms of sensibility and pure concepts of the understanding in the second part of the transcendental deduction of the categories) and to give a systematic presentation of the structure of the whole of our cognitive faculty.

The *Critique*, says Kant, analyzes *a priori* cognitions *for the sake of synthesis*, “on account of which the whole critique is actually undertaken”.⁸² Given the preceding

⁷⁹ Kant describes the analytic in similar terms in *Jäsche Logic*, “Analytic discovers through analysis all the actions of reason that we perform in thinking.”(JL 16).

⁸⁰ (KrV A62/B87).

⁸¹ Note that the order in which Kant considers transcendental ideas in the Dialectic is explicitly analytic. He claims for example, that although the systematic presentations of the three main ideas of metaphysics – God, freedom, and immortality – must take them in this synthetic order, this is not the approach he takes in the *Critique*. The systematic (synthetic) presentation would show how the idea of God together with freedom leads to the idea of immortality. But, in working through these ideas, which must be done before their systematic presentation, the reverse, analytic order, is more suitable. That is, the Dialectic examines the ideas of reason, by “proceeding from what experience makes immediately available to us from the doctrine of the soul, to the doctrine of the world and from these all the way to the cognition of God.” (KrV B395fn). We find a parallel sequence in Kant’s discussion of the practical content of these ideas in the *Critique of Practical Reason*.

⁸² (KrV A14/B28).

discussion, I think we should understand Kant's reference to 'synthesis' here in two related and complementary senses.

On the one hand, the analysis of our cognitive faculty and its concepts is performed for the sake of showing *how synthetic a priori cognitions are possible* and, in general, examining a possible *synthetic, or real, use* of our pure cognitive faculties – both of pure understanding and of pure reason; proving this possibility through experiments on reason, at it were. The Analytic part of the *Critique* proves the possibility of a real or synthetic use of pure understanding – its activity in constituting experience and its objects. The Dialectic examines the synthetic use of pure theoretical reason – the activity in which it applies the categories of the understanding beyond experience and produces 'transcendental' ideas of the unconditioned conditions, such as God, freedom, and immortality. This critical self-investigation of reason in general is undertaken for the sake of putting together "the whole well-proved and well-tested plan" for developing metaphysics as a science.⁸³ By "*analyzing*" our cognitive faculty the *Critique* develops the "complete idea of transcendental philosophy" – an architectonic plan⁸⁴ that specifies the boundaries and the entire internal structure of reason. In this way, the *Critique* fully "preforms" the "germ" of metaphysics⁸⁵, enabling "a rebirth of the science according to a new plan".⁸⁶

On the other hand, and I think this is Kant's primary meaning, the "Analysis" that makes possible such a plan is performed *for the sake of*, and must precede, the synthetic

⁸³ (P 4:365).

⁸⁴ (KrV A13/B27).

⁸⁵ (P 4:368).

⁸⁶ (P 4:257).

construction of the future system of metaphysics. This construction involves *actual synthetic use* of pure understanding and pure reason within proper bounds established through the transcendental critique.

To sum up, on the one hand, the method of the *Critique* is the method of analysis followed by synthesis that shows how synthetic use of understanding and of reason is possible *a priori* (for example, showing that the relation of its *a priori* principles of the understanding to the sensible forms of space and time is a condition of all possible experience⁸⁷) and develops a complete system of *a priori* concepts and principles of pure reason. On the other hand, the *Critique* as a whole is engaged in critical analysis of the entire faculty of pure reason – analysis that is required before the metaphysical system can be built on the basis of the architectonic plan outlined in the *Critique*.

The Newtonian principle that in scientific investigation analysis must precede synthesis, is therefore, fundamental to the very idea of the critique of pure reason and its role in preparing the way for the science of metaphysics.

So far, I have sketched a general account of Kant's critical method as shaped by the "new method in experimental philosophy". For Kant, only a new critical method modeled on the method that revolutionized natural science can definitively prove the validity of his Copernican turn and rule out the traditional ways of thinking about the relation between the mind and the world, establishing the secure basis for all future metaphysics. Kant's critical project in general is both a Copernican transformation of the concept of metaphysics and the Newtonian transformation of the method of philosophy that makes the former possible. In the next chapter, I will turn to Kant's practical philosophy and

⁸⁷ See, e.g., Kant's letter to J.S. Beck, January 20, 1792 (AK 11:314-5).

argue that Kant's methodological Newtonianism has fundamental implications for the structure of his moral theory.⁸⁸

⁸⁸ It is reasonable to ask whether Newtonian method, concerned as it is with theoretical knowledge of the natural world, with the discovery of physical workings of nature, has relevance in the practical sphere and is applicable to the system of practical knowledge – a priori knowledge concerned with production of its objects, with making “the good” actual, as it were (For the distinction between theoretical and practical cognition/knowledge see (KrV b ix-x; cf. KpV 5:46; 5:89)). The answer is suggested by the fact that, for Kant, the concept of science has two inseparable and deeply interconnected aspects – science is both a system of knowledge of a certain domain – “a system, that is a whole of cognition ordered according to principles” (MFNS 4:467) and the practice governed by a proper method – “the way a cognition can attain scientific form” (*Dohna-Wundlacken Lectures on Logic*, AK 9:779) – and aimed at producing a system of knowledge characterized by ever increasing unity and completeness.

Indeed, Kant conceives of the fundamental principles of any science in practical terms – as constituting a general framework for reasoning about the object of science. The inquiry structured by this framework, and regulated by rational principles of systematic unity, allows for gradual development of an increasingly systematized body of knowledge based on the pure and coordinating strata of the theory. Practical knowledge is productive of its object. This knowledge and the practice that produces it are not only inseparable, they are grounded on the same fundamental principle – the moral law. For Kant, in seeking the system of practical knowledge as the system of principles that govern the moral realm we aim at the perfection of cognition characterized by the same attributes of distinctness, thoroughness, and systematic ordering. The idea that practice structured and regulated by principles of pure reason is what alone can produce such a system lends itself naturally to the practical sphere.

Chapter 2

Kant's Science of the Moral World and Newtonian Methodology

In chapter 1, I proposed the view of Kant's critical method as shaped by the "new method in experimental philosophy" and characterized Kant's approach in general as "broadly Newtonian". In this chapter, I argue that, as an integral part of philosophical science, Kant's moral theory appropriates central aspects of the new scientific method to the investigation of practical cognition. This is manifested in the need for the critique of practical reason to precede the construction of the metaphysics of morals. Moreover, the practical critique itself – the way in which it establishes the moral law, deduces the reality of freedom, and critically examines the practical use of pure reason in constructing *the good* – can be thought of as a Newtonian-style philosophical investigation of morality *from the practical standpoint*. Indeed, unlike most modern ethical theories that praise themselves for their affinity with the theoretical sciences (particularly various flavors of consequentialism and subjectivism), Kant's theory adapts the method of natural science to the investigation of morality from the standpoint of concern with the *activity* of rational agency in practical thought and action.^{89, 90} Ultimately, my aim is to show that

⁸⁹ I borrow this contrast from Stephen Engstrom's *The Complete Object of Practical Knowledge* where he distinguishes between moral theories that retreat to the external standpoint of a spectator on morality and theories that investigate morality from the practical standpoint.

⁹⁰ The methodological continuity between theoretical and practical philosophy is needed first of all in light of Kant's conception of philosophical knowledge as forming a complete systematic unity (see, for example, KrV A 833/B861). Moreover, although a distinction between theoretical and practical knowledge and the respective philosophical enterprises is very important for Kant – while the former deals with "what is", the latter is concerned with what "ought to be" and is efficacious with respect to its object – he also recognizes a fundamental affinity between them as species of "material cognition." Unlike formal philosophy, or general logic, which is occupied with inner laws of thought, material philosophy has to do with *objects* and the laws to which *they* are subject. Both theoretical and practical branches of material philosophy have to

Kant's moral theory has a Newtonian "form of science" and that "Copernican" transformation in practical philosophy is inseparable from Kant's "methodological Newtonianism".

I first consider Newtonian elements in Kant's method in the *Groundwork* and then in the *Critique of Practical Reason*. As we shall see, these elements parallel the Newtonian features of Kant's approach in theoretical philosophy discussed in chapter 1: (i) the idea that practical reason can be subject to experiments, and, in particular, to 'decisive' experiments, (ii) the rejection of the method of hypotheses, and (iii) a concomitant requirement that philosophical investigation of practical reason and development of the science of morals must proceed by analysis followed by synthesis.

1. Kant's Newtonian approach to the science of morals: the Groundwork

1.1

It is well-known that the development of Kant's practical thought was deeply influenced by the work of Jean-Jacque Rousseau. Kant considered Rousseau's conception of freedom as the essence of the will to be a profound insight into a fundamental law able to ground a moral world as orderly and rational as the physical world that emerged through Newtonian science. In the 1764 *Observations on the Feeling of Beautiful and Sublime*, Kant elevates Rousseau's achievement to the level of Newton's:

"Newton saw for the first time order and regularity combined with great simplicity, where before him was found disorder and poorly matched multiplicity; and since then comets run in geometrical courses. Rousseau discovered for the first time beneath the multiplicity of forms human beings have taken on their deeply buried nature and the hidden law..." (Observations, Ob 2:219-20)

account for the relationship between pure and empirical aspects of our cognition. For, on the one hand, material philosophy seeks laws and principles, which, as such, require *a priori* foundation. And on the other, our cognition of the way these laws are at work in experience is conditioned by our sensible nature. Thus, the doctrine of nature "must determine laws of nature as an object of experience" and the doctrine of morals is concerned with "laws of the human being's will insofar as it is affected by nature" (G 4:388).

Yet already in this pre-critical work, Kant recognizes that if moral inquiry is to result in stable and definitive answers and to become the science of morals, this discovery alone is not enough. The philosophical investigation of morality must also exhibit the rigor and systematicity of Newtonian natural science – the qualities that Rousseau’s own philosophy arguably lacks. It requires a new method able to give it a properly scientific form.

Taking this path means that the philosophical science of morals cannot be founded on assumptions about a human being in a hypothetical state of nature (as Rousseau tried to do, for example) – that would amount to feigning hypotheses. It must begin instead with analysis of the ordinary moral understanding. Thus, Kant remarks in the *Observations*: “Rousseau... proceeds synthetically and begins from the natural human being; I proceed analytically, beginning from the civilized human being.” (Ob 2:207-208)

This is indeed how Kant proceeds in his critical examination of the foundations of morality in the *Groundwork of the Metaphysics of Morals*. The *Groundwork* begins with the analysis of ordinary moral judgments of a “civilized human being” – a being who by nature tends toward society and whose life in community with others requires *co-existence* and *co-ordination* of often mutually-opposing interests and ends. This is a being who stands in social relations to others and is able to share their ends; who employs moral concepts that bind her to others, most importantly, the concepts of *duty* and *right*, and the concept of a good will.⁹¹ Kant wants to make explicit the rational order in the

⁹¹ Kant starts with what Ernst Cassirer calls “the fact of civilization”: “Metaphysics must not be based upon invented or hypothetically improvised facts; it must begin with what is given, with empirically ascertained data. And in this sense our only datum is civilized man, not the Rousseauian savage who wanders alone in the forests....This beginning is indicated because in the concept of man civilization constitutes no

varied and complicated phenomena – in this case, the “phenomena” of practical judgment of common understanding, including “the generally received concept of morality”,⁹² and of practical life in a social world comprising a plurality of human beings whose mutual interactions have an essential moral character. Kant describes the method of the *Groundwork* as analysis followed by synthesis:

“I have adopted in this work the method which I think most suitable, **proceeding analytically from common knowledge to the determination of its ultimate principle**, and again **descending synthetically from the examination of this principle and its sources to the common knowledge in which we find it employed.**”(G 4:392, my emphasis)

Section one of the work *ascends* from the concept of a good will as the only thing of unconditional worth to the categorical imperative as the principle governing such a will. The second section starts with the concept of a rational agent and analyzes the concept of the moral law as an unconditional requirement. This analysis *ascends* through a sequence of formulations of the categorical imperative to the idea of the moral law as the principle of freedom as *autonomy of the will*. The latter is then represented more concretely as an agent’s capacity to be a legislative member of a possible kingdom of ends – “a whole both of rational beings as ends in themselves and of the ends of his own that each may set himself”.⁹³

The three main formulations of the categorical imperative – the so-called formulas of the Universal Law, of Humanity, and of Autonomy – emphasize different mutually-supporting aspects of the moral law. Together, they fully express what the moral law (as

secondary or accidental characteristic but marks man's essential nature, his specific character. He who would study animals must start with them in their wild state; but he who would know man must observe him in his creative power and his creative achievement, that is, in his civilization.” (Ernst Cassirer, *Rousseau, Kant, Goethe: Two Essays*, Princeton University Press, 1945, p. 22).

⁹² (G 4:445).

⁹³ (G 4:433).

an idea of reason) means *for us* – finite rational beings for whom the capacity to act on principles implies the capacity to set ends, who act and interact in the natural world, and have natural needs, dispositions, interests, and desires, and naturally aim at happiness.

The formulations of the categorical imperative are, at bottom, three different *ways of representing* the moral law⁹⁴ – the fundamental law that governs the activity of pure practical reason. They are, in a sense, different *aspects* of the synthesizing activity of practical reason that brings together rational and sensible aspects of a finite rational will; as “principles of coordination” between *the idea of the moral law* as a law of a pure rational will and *the sensibly-affected power of choice*. In the third section of the *Groundwork*, Kant offers an illuminating description of this unifying character of the categorical imperative:

“[T]his categorical ought represents a synthetic proposition *a priori*, since to **my will affected by sensible desires** there is added **the idea** of the same will but belonging to the world of the understanding – a will pure and practical of itself, which contains the supreme condition...of the former will; this is roughly like the way in which concepts of the understanding, which by themselves signify nothing but lawful form in general, are added to intuitions of the world of sense and thereby **make possible synthetic propositions *a priori* on which all cognition of a nature rests.**” (G 4:454, my emphasis)

The parallel between the synthesizing role of the understanding (in the transcendental laws of nature known as the analogies of experience) and of pure practical reason (in the categorical imperative) is significant. The analogies of experience form an *a priori* conceptual framework that first allows Kant to draw a distinction between what, in the *Prolegomena*, he calls subjective “judgments of perception” and objective

⁹⁴ (G 4:436).

“judgments of experience”.⁹⁵ Similarly, the formulations of the categorical imperative structure all practical cognition. They constitute the fundamental conceptual framework within which we can first give determinate meaning to the distinction between subjective and objective practical judgments (judgments that are valid merely for the subject who holds them and judgments that are always valid for all). This framework, therefore, first allows us to make sense of the fundamental moral concepts such as *duty*, *right*, the *good*, and the very concept of moral agency.^{96 97} For Kant, the categorical imperative is the sole criterion for drawing the distinctions between what merely *seems* to be a *duty*, a *right*, a *good* and what actually *is*; and it tells us that a *person* is just that being who is *capable* of drawing these distinctions and is *bound* to draw them. In other words, the categorical imperative first specifies what it means to be a finite rational being acting on principles, a *vernünftig* (rational and reasonable) being in the order of nature, a person under the moral law. It constitutes the moral space within which *actual* mutual recognition, communication, joint-reciprocal deliberation, and action are first rendered intelligible. Only after moral concepts are given determinate meaning through the categorical imperative, can we properly formulate questions about them and hope to provide

⁹⁵ “Judgments of perception” are *subjectively* valid judgments that “hold good only for us” and are based on a subject’s particular empirical association in imagination, while “judgments of experience” are *objectively* valid judgments that “always hold good for us and in the same way for everybody else.” See *Prolegomena* §18-20, (P 4:298-9).

⁹⁶ This is why, for example, after concluding that there is only one categorical imperative, from which all imperatives of duty derive, Kant adds that now the concept of duty can be made comprehensible – “we shall at least be able to show what we think by it and what the concept wants to say.” (G 4:421)

⁹⁷ We can therefore think of Kant’s initial characterization of a rational agent as a being with the capacity to act on representations of laws, and of a mere idea of a moral law, as something like nominal definitions. Recall that a nominal definition, according to Kant, is a definition that merely distinguishes a term from other terms and does not say anything about the essential nature of an object of a concept being defined or its possibility in experience.

definitive answers. Indeed, it is a central feature of Kant's Copernican transformation in practical philosophy that we should think of the categorical imperative in this way.

Paraphrasing Kant, we can add that the formulations of the categorical imperative are synthetic propositions *a priori*, on which all practical cognition of moral nature rests. That is, they are ways of representing the fundamental law of action through which the kingdom of ends can be realized (or at least approximated) as a natural social world.

1.2

The two "analytic" sections of the *Groundwork* isolate pure and empirical aspects of rational agency and *formulate* the fundamental principle of morality, making explicit the relation between the moral law and autonomy of the will. Yet, since synthetic *a priori* propositions cannot be justified by mere analysis of concepts, the third "synthetic" section contains a transition from *analysis of moral concepts* to *the critical examination of the activity of pure practical reason* (exercised in practical thought and judgment), or the "critique of the subject", as Kant puts it. He explains the different roles of the analytic and synthetic stages of the argument of the *Groundwork* this way:

"That this practical rule is an imperative, that is, that the will of every rational being is necessarily bound to it as a condition, **cannot be proved by mere analysis of the concepts** to be found in it, because it is a synthetic proposition; one would have to go **beyond cognition of objects to a critique of the subject, that is, of pure practical reason**...But that the... principle of autonomy is the sole principle of morals can well be shown by mere analysis of the concepts of morality. For, by this analysis we find that its principle must be a categorical imperative, while this commands neither more nor less than just this autonomy." (G 4:440, my bold)

The "synthetic" stage of Kant's procedure aims to show that the categorical imperative *is* the fundamental principle of the will and, thereby, to *establish* it as the foundation for the future science of metaphysics of morals. It offers an argument from an agent's consciousness of the independence of reason from merely subjective determining

causes to her right to hold that the moral law can determine her will *a priori*, and to the possibility of a pure moral interest. We can legitimately hold the moral law to be binding on us, and claim to take *pure* interest in morality, because we can rightfully claim to have autonomous wills. And we can claim to have such wills, Kant argues, because our reason requires us to think of ourselves from two standpoints – as *purely rational* beings and as beings with a *sensibly-affected* power of choice who act *under the idea of freedom*. Only because we are constrained to “regard ourselves as belonging to the world of sense and yet **at the same time** to the world of understanding”, do we have the right to consider ourselves as free in our choices or take ourselves to stand under the moral obligation to anyone.⁹⁸ This is why, I submit, Kant describes this section as *descending synthetically*, “from the examination of the principle of morality and its sources to the common cognition in which we find it used”.⁹⁹ It *descends* or *progresses* from the moral law and its ground in freedom to our thinking of ourselves as free and as capable of *pure* moral interest, and to common moral understanding of duty and obligation.¹⁰⁰

⁹⁸ See (G 4:453). In my view, the latter is implied by Kant’s discussion of the way he removes the suspicion of a circle in the inference from freedom to autonomy at (4:453), culminating with the claim that “when we think of ourselves as free we transfer ourselves into the world of understanding as members of it and cognize autonomy of the will along with its consequence, morality; but *if* we think of ourselves as put under obligation, *we regard ourselves as belonging to the world of sense and yet at the same time to the world of understanding*”. I take Kant’s point here to be similar to the one he makes in the Doctrine of Virtue in discussing the antinomy in the concept of duty to oneself. Being put under moral obligation to another requires that I recognize the authority of an obligator by constraining myself (making a law for myself) to obey the obligation he imposes on me and such a constraint can proceed only from my own reason. For if it is truly a duty, an unconditional requirement, then it cannot issue from any condition, that is, from any end or object of desire. The very idea of self-constraint as an ability to make a law for oneself independently of inclinations implies “a doubled self” – the idea of my will as belonging to the world of the understanding and directly legislative for my sensibly conditioned power of choice, with empirically-based desires and inclinations that do not necessarily agree with reason.

⁹⁹ (G 4:392).

¹⁰⁰ Henry Allison argues in his Commentary on the *Groundwork* that Kant’s characterization of his procedure in *Groundwork* III as synthetic and culminating in a descent to the common rational cognition is justified by the fact that Kant claims that his “deduction” of the moral law is confirmed by common moral understanding. In this respect, Allison highlights the significance of the passage in which Kant claims that

1.3

Kant describes the third section of the *Groundwork* as devoted to the discussion of the “main features” of a critique of pure practical reason, which is supposed to prove that morality is real, and “not a chimerical idea”:

“That morality is no phantom – and this follows if the categorical imperative, and with it the autonomy of the will, **is true** and **absolutely necessary** as an *a priori* principle – requires **a possible synthetic use of pure practical reason**, which use however, **we** cannot venture upon without prefacing it by a critique of this rational faculty itself, the main features of which **we** have to present, sufficiently for our purpose, in the last section.” (G 4:445, my bold)

What Kant means by *our venturing* on a “*synthetic use of pure practical reason*” here is best understood against the background of his methodological Newtonianism, and particularly the requirement that critical analysis must precede synthesis.

We can make the following observations about this passage. First, Kant tells us that the objective reality of morality, the *truth* of the categorical imperative, and, with it, of the autonomy of the will, requires that a *synthetic use of pure practical reason* be *possible*. Secondly, whatever this use is, he claims that “we” cannot venture upon this use without prefacing *this venturing* by a critique of pure practical reason, of which the *Groundwork* III presents the main features.

So what is this “synthetic use of pure practical reason” – a phrase Henry Allison calls “deeply ambiguous”?¹⁰¹ What would it mean for *us* to venture on this use? One way to understand Kant’s phrase is to take it to refer to the agent’s use of pure practical reason in

“The practical use of common human reason **confirms** the correctness of this deduction”, for even “the most hardened scoundrel” recognizes the supreme authority of the moral law over his sensible will, “even while he transgresses it” (G 4:454). Although, I agree that this passage is part of Kant’s synthetic (descending) presentation in the third section, it seems that Kant’s “deduction” itself is at the center of this descent.

¹⁰¹ Henry Allison, *Kant’s Groundwork for the metaphysics of Morals: a Commentary*, p.269.

determining the will, contrasting it with the practical use of reason in forming and imposing hypothetical imperatives. This is, indeed, how Allison understands it.

Yet, it is clear from the structure of the passage that Kant's "we" refers to *us* as philosophical investigators, since it is the same "we" who must preface venturing on the synthetic use of pure practical reason with the critique and who are to present the main features of this critique in the last section of *Groundwork of the Metaphysics of Morals*. Thus, Kant's claim is that the critique as a whole must prove the possibility of a "synthetic use of pure practical reason", before "we", the philosophers, can venture upon this use.

It is true that the use of pure reason in determining the will is its synthetic and practical use, as Allison suggests. But, I think that in the context of this passage Kant means something more specific – something that comes into view when we consider this passage in light of Kant's methodology. That is, when Kant speaks of *our* venturing on a "synthetic use of pure practical reason" he refers, in the first place, to *our philosophical consideration* of the synthetic, or real, use of pure practical reason in the *metaphysics of morals*, for which the *Groundwork*, as its title suggests, offers a basis. It is a synthetic use of pure practical reason in constructing or constituting its objects – actions and ends that fall under the concept of *the good*. This includes our consideration of the use of pure practical reason in constituting the duties of right and of virtue and ultimately in constituting the duty to promote the realization of *the highest good* – the *complete object* of pure practical reason. The highest good is an ideal social world that synthetically combines complete morality and complete happiness of its members, and under which all good ends are subsumed. Kant "ventures" on this synthetic use of pure practical reason

both in his doctrine of the highest good that gives objective practical content and validity to traditional metaphysical ideas (mainly in the Dialectic of the second *Critique* and in the *Religion within the Boundaries of Mere Reason*)¹⁰² and in the *Metaphysics of Morals*, which makes synthetic use of the moral law as the fundamental principle of pure practical reason by applying this principle to human nature in general (with its necessary end of happiness). Any such science of metaphysics, on Kant's view, must be prefaced by a critique that establishes the possibility of this use. As Kant puts it later, in the *Critique of Practical Reason*, "It was necessary first to establish and justify the purity of [the moral law's'] origin ... **before science would take it in hand in order to make use of it.**"¹⁰³ Indeed, Kant's analysis of the concept of morality and establishment of the moral law through a critique aims to provide the foundation for the whole of the science of morals, which includes a rational part (a metaphysics of morals) as well as applied ethics or "moral anthropology" that deals with "the development, spreading, and strengthening of moral principles...and with other similar teachings and precepts based on experience".¹⁰⁴

¹⁰² Kant considers the synthetic, or real, use of pure theoretical reason in the Dialectic of the *Critique of Pure Reason*. This is its use in seeking the unconditional totalities in the form of traditional ideas of metaphysics (See, for example, Kant's reference to this use in the *Critique of Practical Reason*, KpV 5:52-3). Pure practical reason, says Kant in the Dialectic of the second *Critique*, "seeks the unconditioned for the practically conditioned...not indeed as the determining ground of the will, but even when this is given (in the moral law), it seeks the unconditioned totality of the object of pure practical reason, under the name of the highest good"(KpV 5:108). In constructing the concept of this object, pure practical reason synthetically connects two heterogeneous elements – virtue and happiness, or, more precisely, it generates the idea of the highest good – an ideal social world in which universal happiness follows collectively (not distributively) on the morality of its members as its ground. For this reason, in the Dialectic, Kant argues that a rational agent cannot cognize the idea of the highest good, and the duty to promote it, analytically, but only through an *a priori* "synthesis of concepts"(KpV 5:113). He stresses the same point in *Religion*: "[T]hat every human being ought to make the highest possible good in the world his own ultimate end...is a proposition that exceeds the concept of the duties in this world, and *adds a consequence* (an effect) of these duties that *is not contained in the moral laws and cannot, therefore, be evolved from them analytically*" (Rel 6:6fn, my emphasis). In other words, this cognition requires a synthetic use of pure practical reason.

¹⁰³ (KpV 5:91, my bold).

¹⁰⁴ (MdS 6:217).

Moreover, it is worth noting that in showing that the synthetic use of pure practical reason is possible, the critique has to establish that the ends or objects of pure practical reason – the ends to which it determines the will, including the highest good – must be thought as practically possible. In chapter 6, I offer an extended argument for the importance of this idea to Kant’s “coherentist” justification of the moral law.¹⁰⁵

I will not attempt to assess here whether the argument of the last section of the *Groundwork* is successful. What matters for the purposes of this chapter is *the way* Kant proceeds in this work and what he aims to accomplish. Kant’s own characterizations of the structure of the *Groundwork* and his remarks about the role of the future critique of the practical use of pure reason indicate the following approach to practical philosophy as a whole. Only after the fundamental principle of morality is specified and established as a governing principle of our will, can the concept of the object of the will – *the good* – be given determinate content. Only then can it be shown how practical laws relate to various empirical aspects of our nature and their specification into particular moral requirements that incorporate social and historical aspects of our practical life be given.¹⁰⁶ In terms of

¹⁰⁵ In other words, what Kant tells us when he says “that...the categorical imperative, and with it the autonomy of the will, is true ... – requires a **possible synthetic use of pure practical reason**” is that the categorical imperative is *true* as an *a priori* principle of the will *only if* it directs us at ends that we can hold to be practically possible.

¹⁰⁶ In the *Metaphysics of Morals*, Kant points out that a number of particular ethical duties, especially ethical duties we owe to each other not just as human beings, but as particular persons – duties that include such obviously important things as treatment of people in accordance with differences in rank, age, sex, social and economic background, etc. – “cannot properly constitute *a part* of the metaphysical first principles of the doctrine of virtue”. Rather, they are “rules modified in accordance with differences of the subjects to whom the principle of virtue (in terms of what is formal) is *applied* in cases that come up in experience (the material)” (MdS 6:468) for “just as a passage from the metaphysics of nature to physics is needed – a transition having its own special rules – something similar is rightly required from the metaphysics of morals: a transition which, by applying the pure principles of duty to cases of experience, would schematize these principles, as it were, and present them as ready for morally practical use.” (MdS 6:468). Moreover, the transition from the metaphysical foundations of natural science to physics is supposed to provide a philosophical foundation for the systematicity of physics. Kant writes, for example, “The transition from the metaphysical foundations of natural science to physics is the method of bringing about a systematic cognition of physics (which cannot be done through merely collected experiences

the Newtonian “form of science”, this means that, for Kant, only after the formal and coordinating strata of the moral theory are established, can the metaphysics of morals be developed as a science that “makes possible a system of freedom like a system of nature” and guides us in putting the idea of reason into effect.¹⁰⁷

In the next section, I give an account of what it means for the *Critique of Practical Reason* to take the methodological path of the new natural science. I begin by making explicit the way Kant’s practical critique adopts the Newtonian prohibition against feigning hypotheses and reflects the idea that scientific investigation must proceed by analysis followed by synthesis. I then turn to the role of a decisive experiment in the critical investigation of practical reason.

2. Kant’s re-conception of Newtonian method and construction of the good: the Critique of Practical Reason

2.1

In the preface of the *Critique of Practical Reason*, Kant re-affirms his commitment to the idea that philosophical investigation cannot begin with real definitions. “Such a precaution,” he notes, “namely, not to anticipate one’s judgments by definitions ventured before complete analysis of the concept, which is often achieved very late – is to be highly recommended throughout philosophy”.¹⁰⁸ Rather than “feigning hypotheses”, philosophy, and moral philosophy in particular, must proceed in a way that allows reason itself to settle disputed questions through critical examination and experiment on its own

because the sketch of a system is missing that must be given a priori.” (21:492.21-24) The transition from the metaphysics of morals to ethics can be seen as assigned a parallel role as a method of systematizing ethical cognition, unifying it through constructing an ethical commonwealth (or the highest good), the idea of which is a regulative principle of this transition.

¹⁰⁷ (MdS 6:218).

¹⁰⁸ (KpV 5:9fn).

activity and use. This means that a critique of reason's practical use cannot begin with a substantive conception of *the good* (the purported *real definition* of this concept) or presuppose anything about the fundamental laws of the will.

The Analytic of the *Critique of Practical Reason* opens with the idea of a practical principle that is *not fully determinate*, offering a *nominal* definition of such principles in general¹⁰⁹, subsequently determining the concept of an objective practical principle (a law) as the categorical imperative. Moreover, when later in the Analytic Kant first defines the concept of *the good*, he does not do so in terms of the principle of *pure practical reason*. Rather, he calls it "a necessary object of the faculty of desire...according to a principle of reason",¹¹⁰ without specifying what this principle is and, therefore, leaving it at first unsettled whether there is such a thing as the unconditional good at all.¹¹¹ A few paragraphs later Kant explains why he takes this approach:

"[E]ven if we did not know that the principle of morality is a pure law determining the will *a priori*, we would at least have to **leave it undecided in the beginning** whether the will has only empirical or also pure determining grounds *a priori*, **in order not to assume principles quite gratuitously.**" (KpV 5:63, my emphasis)

The question of the possibility of the unconditional good and of reality of pure practical reason can only be answered by reason's own systematic critique of its practical use.

One of the main tasks of the *Critique of Practical Reason* is to specify determinate meaning for the initially indeterminate concept of *the good*. This requires, in the first

¹⁰⁹ (KpV 5:19).

¹¹⁰ (KpV 5:58).

¹¹¹ This is a point emphasized by Stephen Engstrom in his recent study of the categorical imperative,

place, drawing the distinction between the unconditioned good or good in itself and the good that is conditioned or relative (that depends on the goodness of something else). The central claim of the *Critique* is that only the moral law can serve as the criterion for this distinction.

Kant famously calls it the “paradox of method” in the *Critique of Practical Reason* that “the concept of good and evil must not be determined before the moral law ...but only... after it and by means of it”.¹¹² We can say that the “paradox” lies precisely in the fact that while a critique can begin with a *nominally* defined concept of *the good*, this concept can be given determinate objective meaning – the *real definition*, as it were – only after the moral law is established and by means of it.¹¹³

In parallel to the first *Critique*, the *Critique of Practical Reason* starts out by isolating and analyzing elements and aspects of the activity of practical reason and examining relations between them *for the sake of synthesis*.¹¹⁴ This synthesis has at least three aspects. First, the *Critique* aims to *prove* the validity of the moral law and the reality of pure practical reason, that is, to establish the possibility of the synthetic use of pure reason in practical judgments. Its *Analytic* also provides insight into the possibility

¹¹² (KpV 5:63).

¹¹³ Stephen Engstrom makes a similar point in *The Form of Practical Knowledge: A Study of the Categorical Imperative*, where he argues that in calling attention to the second *Critique*'s “paradox of method”, “Kant does not claim that the moral law is prior to the *concept* of the good. He only says that this concept must not be *determined* prior to the moral law but only after it and through it. He is not asserting, in other words, that the original, *indeterminate* concept of the good – the concept to be determined in practical judgment – is posterior to the moral law. His method merely requires, in accordance with the “fact” of reason, or our consciousness of the unconditional moral law, that the determination of the concept of the good be wholly in conformity with that law of the will's autonomy. He is opposing the method of heteronomous theories, which first seek to determine, independently of the moral law, what the (achievable) good consists in, and then attempt to explain or to vindicate that law by showing that following it will make the realization of this good possible.” (FPK, pp.179-180)

¹¹⁴ It begins by taking on board and re-producing some of the analytic results of the *Groundwork*. In fact, Kant claims that the *Critique* presupposes the *Groundwork*'s analysis and justification of the determinate formulations of the moral law. See (KpV 5:8).

of a system of practical categories and of pure practical reason's *a priori* influence on sensibility. Second, it analyzes the practical use of reason with a view towards establishing the complete fundamental framework on which the science of morals can be build. Third, it uses the reality of the moral law as the basis for the "deduction" of freedom. That is, in the *Analytic*, Kant shows that the moral law gives determinate practical meaning to the theoretically *problematic* idea of freedom and warrants its reality from a practical point of view. In the *Dialectic*, he goes on to argue that the moral law similarly confers objective practical reality and meaning on the theoretically indeterminate concepts of God and immortality as necessary conditions of the possibility of the ideal of the highest good – the world of freedom realized as the natural social world. The idea of freedom, Kant tells us, serves as "the *keystone* of the whole structure of a system of pure reason, even of speculative reason"¹¹⁵ – it makes possible the completion of the architectonic plan of a system of pure reason as a whole.

Kant describes the *Dialectic* of the second *Critique* as "the second stage" of the critical investigation of reason that establishes the relation between theoretical and practical use of pure reason – as "a synthetic return to what have previously been given analytically".¹¹⁶ On a widely shared interpretation, this synthetic stage of Kant's argument in the *Critique of Practical Reason* strengthens the moral law's credentials because it answers the need of pure reason to comprehend and affirm its theoretically

¹¹⁵ See (KpV 5:3-4; 10). This architectonic view is the concern of the *Dialectic* of the second *Critique*. In the preface to the second edition of the *Critique of Pure Reason*, Kant hints at the role of pure practical reason in constituting the unity of reason as a whole and at the confirmation this offers to the system of pure reason developed in the first *Critique*. He writes, "I hope this system will henceforth maintain itself in this unalterability. It is not self-conceit that justifies my trust in this, but rather *merely the evidence drawn from the experiment* showing that the result effected is the same whether we proceed from the smallest elements to the whole of pure reason or return from the whole to every part (*for this whole too is given in itself through the final intention of pure reason in the practical*)..." (KrV bxxxviii, my emphasis)

¹¹⁶ (KpV 5:10).

problematic ideas. It is a key part of Kant's 'comprehensive' (or, to use Rawls's term, 'coherentist') approach to justification of morality. Moreover, it is a part of Kant's 'comprehensive' justification of transcendental idealism and the system of *pure reason as a whole*. For this synthetic step, says Kant, offers "a very satisfying confirmation of the speculative *Critique's consistent way of thinking...*inasmuch as it insisted of letting objects of experience as such, including even our own subject, to hold only as appearances but at the same time on putting things in themselves as their basis."¹¹⁷

Consider now the "experimental aspect" of Kant's method in the *Critique of Practical Reason*. The focal point of the Analytic is the argument that the reality of pure practical reason and the validity of the moral law is proven through "the fact of reason" – our consciousness of the moral law as binding in all our practical thought and judgment. This argument is intended to capture the idea that original law-giving is something our pure practical reason *does* by its very nature. Pure practical reason, says Kant, "proves its reality and that of its concepts by what it does."¹¹⁸

Kant compares the method of practical analytic with respect to the argument of the fact of reason to an experimental method of chemistry:

"We have at hand examples of reason judging morally. We can **analyze them into their elementary concepts** and, in default of mathematics, adopt a procedure similar to that of *chemistry* – the **separation, by repeated experiments on common human understanding, of the empirical from the rational** that may be found in them – and come to know both of them pure and what each can accomplish of itself" (KpV 5:163, my emphasis)¹¹⁹

¹¹⁷ (KpV 5:6).

¹¹⁸ (KpV 5:3).

¹¹⁹ In the Critical Elucidation of the Analytic section of the *Critique of Practical Reason*, Kant similarly notes that, in searching for the fundamental principles of the doctrine of morals, a philosopher can, "almost like a chemist", "at any time set up an experiment with every human practical reason in order to distinguish the moral (pure) determining ground from the empirical, namely, by adding the moral law (as a determining ground) to the empirically effected will" (KpV 5:92). In fact, Kant compares "philosophical

That is, the fact of reason experiment represents a Newtonian-style “analytic situation”, which allows Kant to isolate determinations of the will by pure reason alone from determinations of the will by empirical practical reason, and to establish an *a priori* formal relation between pure practical reason and the sensibly-affected power of choice. The argument of the fact of reason is based on our consciousness of the activity of pure practical reason that “produces” the reality of the intrinsically good as determinations of the will. It *exhibits* the moral law as “given” *a priori* by pure reason and, thereby, “proves” an existential claim that *there is pure practical reason*. Kant’s use of the term “proof” here, I suggest, is best understood in the way Newton uses it – as subjection of a proposition to test by experiment and observation – except in this case, of course, the experiment is conducted on our practical reason itself and without the help of mathematics.

The experiment of the fact of reason both grounds the theory which defines *the good* in terms of the moral law as the principle of autonomy of the will and allows for elimination of all theories that begin with a substantive concept of the good in order to establish the principles of morality on the basis of their ability to bring about that good. Kant argues that, given that these alternative theories do not determine their concept of the good through the *a priori* practical law, they necessarily define it in terms of agreeable effects of our actions. They, therefore, place the criterion of good and evil in material practical principles, and treat them as sole determining grounds of the will. The fact of reason argument that proves that pure reason can be practical allows Kant to rule out all such heteronomous theories while confirming his own Copernican transformation

experiments” with chemical experiments even in the *Critique of Pure Reason*. See, for example, (KrV bxx-bxxi; bxxi fn) and (KrV A842/B870).

in practical philosophy. Indeed, the first section of the practical Analytic concludes with a comparative exercise of the kind made possible by Newtonian crucial experiments:

“If we now compare our *formal* principle of pure practical reason (as that of autonomy of the will) with all previous *material* principles of morality, we can set forth all the rest, as such, in a table in which all possible cases are actually exhausted, except the one formal principle; and thus we can prove visually that it is futile to look around for any other principle than that now presented...” (KpV 5:39)

2.2

The reality of the moral law, established through the fact of reason, plays the role of an “axiom” in Kant’s moral theory – a fundamental and, from the practical point of view, immediately certain proposition on which our cognition of freedom and the science of morals as a whole can be grounded.¹²⁰ The necessity of determining the will to a certain morally good action reveals to an agent her freedom as an essential property of her will. From a philosophical point of view, the reality of moral law is the basis for the “deduction” of the idea of freedom, as the sole condition or the source of the moral law. The deduction infers *the reality of freedom* from *the reality of the moral law* and gives the theoretically undetermined idea of freedom objective practical content as autonomy of the will. Kant calls this “a grand disclosure” of the intelligible world made possible for us by the moral law.^{121 122}

¹²⁰ Although Kant usually reserves the term “axiom” for intuitively certain propositions of mathematics, he does sometimes allow its use for propositions that are simply immediately certain *a priori*. See for example, *Dohna-Wundlacken Logic Lectures* (AK 9:767). Kant explicitly refers to the reality of the moral law as an ‘axiom’ from which freedom can be deduced in *Jäsche Logic*. He writes: “One cannot provide objective reality for any theoretical idea, or prove it, except for the idea of freedom, because this is the condition of the moral law, **whose reality is an axiom.**” (JL 9:93)

¹²¹ (KpV 5:94).

¹²² The “grand disclosure” of the intelligible world culminates in the Dialectic of the *Critique of Practical Reason*, where the reality of the moral law serves as the ground for Kant’s “moral proofs” of the postulates of reasonable faith, giving objective practical content to the theoretically problematic ideas of God and immortality. This is the way in which the experiment of the “fact of reason” provides the basis for a practical re-conception of these traditional ideas of metaphysics. Indeed, in the Canon of Pure Reason

Newton appeals to *crucial instances* or *decisive experiments* because he takes them to reveal *a priori* (mathematical) relations between elements of a physical system, expressing unknowns in terms of the known, e.g., between the phenomena of motion and underlying forces that cause them. In *Principia*, in particular, this allows Newton to deduce the reality of the force of universal gravitation by applying the axioms, or fundamental laws of nature, to the phenomena of motion. Kant's experiment of the fact of reason plays an analogous role in his theory. It reveals the *a priori* (formal) relation between determinations of the power of choice and a determining power of pure practical reason, disclosing the causality of freedom ("the *ratio essendi* of the moral law"¹²³) through our consciousness of the supreme authoritativeness of the moral law ("the *ratio cognoscendi* of freedom"¹²⁴). This allows Kant to express and determine the concept of the unknown (and, theoretically, unknowable) – the supersensible idea of freedom – in terms of the known – the moral law as the law of autonomy.

We cannot explain *why* the will is free, yet we can still have practical knowledge of freedom as autonomy of the will grounded in our knowledge of the moral law. In *Religion*, Kant draws an explicit parallel between our cognition of freedom and Newton's conception of the force of universal gravity as well as their roles in the respective systems of knowledge:

“This freedom...is no mystery, since cognition of it can be communicated to everyone; the ground of this property, which is inscrutable to us, is however a mystery, since it is not given to us in cognition... *

chapter of the first *Critique*, Kant alludes to the role of the experiment on practical reason in this re-conception: “Now yet **another experiment** remains open to us: namely whether pure reason is also to be found in practical use...” (KrV A804/B832, my bold).

¹²³ (KpV 5:4fn).

¹²⁴ (KpV 5:4fn).

*The cause of the universal gravity of all matter in the world is equally unknown to us.... Yet **gravity** is not a mystery; it **can be made manifest to everyone, since its law is sufficiently cognized**. When Newton represents [gravity] as if it were the divine presence in appearance, this is not an attempt to explain it...but a **sublime analogy** in which the mere union of corporeal causes is put underneath them – and so too would fare the attempt to comprehend **the self-sufficient principle of the union of rational beings in the world into an ethical state, and to explain this union from that principle**. We recognize only the duty that draws us to it...” (Rel, 6:139, fn, my bold)¹²⁵

Note that Kant’s analogy between freedom and gravity is *formal* or *structural* rather than a *substantive* analogy. While the latter kind of analogy concerns the incomplete qualitative similarity of objects or properties, the former has to do with the complete structural similarity of relations of two configurations of different things.¹²⁶ An example Kant favors is the structural analogy between juridical relations of human beings and mechanical relations of moving forces.¹²⁷ Kant’s analogy between freedom and gravity focuses on the *similarity of relations* between the force of gravity (and its law) and the system of nature on the one hand, and between freedom (and its law) and the ethical state on the other.¹²⁸

¹²⁵ Throughout his corpus, Kant draws similar structural parallels between freedom (and its law) and universal gravity (and the law of universal gravitation). See, for example, (MdS 6:449), (P 358; §59, fn43), *Reflexion* 3858 (17:315) as well as *Opus Postumum*: “Newtonian attraction through empty space and the freedom of man are analogous concepts to each other: They are categorical imperatives – ideas. §1. They are both thought (*a priori*) rather than given (empirically); in real relation, indeed, for the foundation of a system of ideal intuitions.” (OP 21:35); “...Attraction through empty space (action in distance, according to Newton); freedom, which postulates a principle of causality in the world (as effect without cause) merely by its veto is the categorical imperative; [Both] lie outside the world, influencing it...” (OP 21:51-52).

¹²⁶ As Kant explains in the *Prolegomena*, a formal analogy “does not signify (as is commonly understood) an imperfect similarity of two things, but a perfect *similarity of relations* between two quite dissimilar things”. (P 4:358)

¹²⁷ In the *Prolegomena*, Kant writes, for example: “[T]here is an analogy between the juridical relation of human actions and the mechanical relation of moving forces. I never can do anything to another man without giving him a right to do the same to me on the same conditions; just as no body can act with its moving force on another body without thereby causing the other to react equally against it. Here right and moving force are quite dissimilar things, but in their relations there is complete similarity.” (P, 4:358fn)

¹²⁸ The ethical state Kant mentions in this passage is an aspect of the highest good. The moral law, Kant argues both in the practical Dialectic of the *Critique of Practical Reason* and in *Religion*, is the basis of a

Our consciousness of the moral law as binding on us is the “practical data of reason” for the *determination* of the “transcendental rational concept of the unconditioned” Kant hints at in the Preface to the *Critique of Pure Reason*:

“[W]hat still remains for us is to try whether there are not **data in reason’s practical cognition for determining that transcendent rational concept of the unconditioned**, in such a way as to reach beyond the boundaries of all possible experience...**but only from a practical standpoint...**”*

* In the same way, the central laws of the motion of the heavenly bodies established with certainty what *Copernicus* assumed at the beginning only as a hypothesis, and at the same time they proved the invisible force (of *Newtonian* attraction) **that binds the universe...**” (KrV bxxi, bxxifn, my bold)

The fact of reason establishes with certainty the Copernican transformation in practical philosophy – the idea that *the good* as the object of practical reason must conform to our practical knowledge of this object, knowledge grounded on the moral law. Moreover, in the Dialectic of the second *Critique*, Kant argues that the reality of the moral law grounds the synthetic proof of the unity of theoretical and practical reason. This argument is based on another *crucial experiment*, as it were, in the form of the antinomy in the concept of *the highest good* – the moral world (or an ethical state) in which happiness of its members follows collectively on their complete virtue. This antinomy represents a putative fault line between theoretical and practical reason. While pure practical reason requires a positive answer to the question of the possibility of the highest good, theoretical reason seems to require a negative one – the most we can expect from nature is a contingent agreement between the morality of an agent and his happiness, but never an agreement according to necessary rules. Kant’s resolution of the

duty to promote the highest good – a claim many Kantians consider deeply problematic. It is often argued, for example, that duty simply does not exist based on Kant’s account of morality since the highest good is not given to us as an end through the Categorical Imperative. See, for example, L.W.Beck, *Commentary on Kant’s Critique of Practical Reason*, pp. 243-245.

antinomy aims to show that the two parts of reason can be brought together into a self-subsisting whole. It is a sort of consistency proof for pure practical reason and for the faculty of reason as a whole, showing that a systematic unity of pure reason is possible.

Through this proof of the possibility of the highest good, Kant argues, the moral law confers objective practical meaning and reality on the theoretically problematic ideas of God and immortality as postulates of rational faith. Thus, the moral law grounds Kant's practical re-conception of the three main ideas of traditional metaphysics – freedom, God, and immortality of the soul. Indeed, already in the Canon chapter of the first *Critique*, Kant alludes to the role of the experiment of the fact of reason in this re-conception:

“Now **yet another experiment** remains open to us: namely whether pure reason is also to be found in practical use, whether in that use it leads us to the ideas that attain the highest ends of pure reason . . . , and thus whether from the point of view of its practical interest reason may not be able to **guarantee** that which **in regard to its speculative interest it entirely refuses to us**” (KrV A804/B832, my bold)

Insofar as practical Dialectic offers this *guarantee*, it confirms *consistency* and *completeness* of the system of transcendental idealism. It provides, as Kant puts it, “a very satisfying confirmation of the speculative *Critique's* consistent way of thinking”¹²⁹ and shows that the interest of speculative reason, which consists in “the *cognition* of the object up to the highest *a priori* principles”¹³⁰, “is **complete in practical use alone**”.¹³¹ Thereby, Kant's practical argument in the Dialectic provides an additional warrant for the Copernican transformation in philosophy in general.¹³²

¹²⁹ (KpV 5:6).

¹³⁰ (KpV 5:120).

¹³¹ (KpV 5:121, my bold).

¹³² As the ground of the deduction of freedom and of the subsequent deductions of the postulates of rational faith in the Dialectic of the *Critique*, the moral law not only gives practical content to transcendental ideas that theoretical reason needs but cannot make intelligible, but also makes possible the unity of reason as a

In the same way as the experimentally derived reality of the laws of motion grounds the “deduction” of universal gravity from phenomena (which Kant takes to be an essential property of matter and an active principle that unifies physical nature), the moral law established through the fact of reason makes possible the deduction of freedom as its sole necessary ground (as an essential property of the will and an “invisible force” that unifies us into a moral community) and as the keystone of the science of metaphysics. Our consciousness of moral law as binding on us *determines* the idea of freedom as the autonomy of the will. “The principle of the unity of freedom under laws”, Kant remarks in one of his reflections, “establishes an *analogon* with that principle that we call nature” and makes possible the “unity of the intelligible world in accordance with practical principles, like that of the world of sense in accordance with physical laws”.¹³³

Indeed, in the Conclusion of the *Critique of Practical Reason*, Kant explicitly connects his method of moral philosophy in general to the Newtonian methodology:

“What, then, is to be done in order to enter upon inquiry in a way that is useful and befitting the sublimity of the subject?...[A]fter there had come into vogue...the maxim of carefully reflecting beforehand on all the steps that reason proposed to take and not letting it proceed otherwise than **on the track of a previously well-considered method**, then appraisal of the structure of the universe obtained quite a different direction and along with it an incomparably happier outcome. The fall of a stone, the motion of a sling, **resolved into their elements and the forces manifested in them and treated mathematically** produced at last that clear and henceforth **unchangeable insight into the structure of the world....This example can recommend that we take the same path** in treating of the moral predispositions of our nature and **can give us hope of a similarly good outcome.**”(KpV 5:162-163, my emphasis)

whole. And this, as the synthetic stage of the Newtonian “system of the world” does for that theory, provides a final warrant for the results of the analytic. For, if in the Dialectic we found irresolvable inconsistencies between the parts previously discovered and established through analysis, we would have to concede that reason as a whole cannot be defended. In the Preface to the second *Critique*, Kant refers to this synthetic examination as offering a “guarantee” of the objective reality of the idea of the faculty of pure reason as a whole. Through this guarantee, pure practical reason and the moral law itself receives an additional authentication.

¹³³ *Reflexion* 7260 (19:296-7).

The good outcome Kant is talking about is the development of the metaphysics of morals as a science. It is now provided with a firm foundation established through the critical investigation of practical reason and can proceed on the path of a “well-considered” method modeled on that of Newtonian natural philosophy.

2.3

In discussing the general structure of Newtonian science, I have argued that a theory developed with the help of Newtonian methodology acquires the Newtonian “form of science” with formal, coordinative, and applied, or substantive, strata. We can see the same three-partite structure emerge in Kant’s critical philosophy (both theoretical and practical). At the first level, there are purely formal elements and nominal definitions, such as space and time as forms of sensibility, the forms of judgment and unschematized categories in the general metaphysics of the first *Critique*. In Kant’s science of morals, this level contains the idea of a *practical law* or the moral law as “the *principle of volition* in accordance with which the action is done without regard for any object of the faculty of desire”¹³⁴, the negative concept of *freedom* as the property of the will of rational beings to be determined independently of alien causes¹³⁵, the concept of a *practical agent* as a being with the capacity to act according to representations of laws, and the nominally defined concept of the *good* in Kant’s science of morals. While Kant of the *Prize Essay* has cautioned against starting philosophical investigation with definitions, unless they are

¹³⁴ (G 4:399).

¹³⁵ In the *Critique of Pure Reason*, Kant also refers to this concept as “freedom in the practical sense” – “the independence of the power of choice from **necessitation** by impulses of sensibility” (KrV A534/B562). This concept is grounded in the transcendental idea of freedom, by which Kant understands “the faculty of beginning a state **from itself**, the causality of which does not in turn stand under another cause determining it in time in accordance with the law of nature” (KrV A533/B561).

nominal, in his critical works, *nominal* definitions become indispensable at the start of the inquiry. He sees the role of a nominal definition to be more like “a *declaration* (of a project) than a definition of an object”¹³⁶, a project the philosophical inquiry is intended to fulfill. In contrast, a *real* definition contains the predicates that specify *essential* properties of a thing. A *real* definition shows what it means for the concept defined to have “objective reality” – for there to be possible objects that fall under this concept – by specifying the clear marks by which the objects of this concept can *be known*.¹³⁷ In contrast to *nominal* definitions, Kant’s *real* definitions, as Lewis White Beck aptly puts it, are “a part and not merely a tool of knowledge”.¹³⁸ These are synthetic definitions at which the science of metaphysics in general, and the science of morals in particular, eventually aim.¹³⁹ For example, the transition from the negative concept of freedom, which in *Groundwork III* Kant describes as “unfruitful for insight into its essence”,¹⁴⁰ to the positive concept of freedom as autonomy of the will represents the kind of transition from a nominal to a real definition Kant seems to have in mind.¹⁴¹

¹³⁶ (KrV A729/B757).

¹³⁷ A “real definition,” according to Kant, is a definition “which does not merely supply other and more intelligible words for the name of a thing, but rather contains in itself a clear **mark** by means of which the **object** can always be securely cognized, and that makes the concept that is to be explained useable in application. A real definition would therefore be that which does not merely make distinct a concept but at the same time its **objective reality**” (KrV A241 fn).

¹³⁸ See Lewis White Beck, *Kant’s Theory of Definition*, in *The Philosophical Review*, Vol. 65, No. 2 (Apr., 1956), p.182.

¹³⁹ In *Jäsche Logic*, Kant writes, for example, “In matters of morals real definitions must always be sought; all our striving must be directed towards this.” (JL 9:144)

¹⁴⁰ (G 4:446).

¹⁴¹ Kant’s *Metaphysics of Morals*, particularly his Doctrine of Right, contains a number of explicit transitions from nominal to real definitions. See, for example, Kant’s nominal and real definitions of “the concept of external objects that are mine or yours” (MdS 6:248-249), of “a right to a thing” (MdS 6:260), and of money (MdS 6:287).

It may be helpful to think of the difference between the respective roles of nominal and real definitions in Kant on the model of John Rawls's "concept/conception" distinction in *Justice as Fairness*¹⁴². Christine Korsgaard describes the general idea as follows: "the concept *refers to whatever solves the problem*, the conception proposes a particular solution. The normative force of the conception is established in this way. If you recognize the problem to be real, to be yours, to be one you have to solve, and the solution to be the only or the best one, then the solution is binding upon you". Accordingly, the task of a practical theory, at least on a constructivist account, is: "to move from concepts to conceptions, by constructing an account of the problem reflected in the concept that will point the way to a conception that solves the problem".¹⁴³ We can then say that, at this level of the theory, we have concepts that declare a project, or merely mark whatever it is that solves the problems the theory as a whole is set to address.

At the next, coordinative, level of the theory, Kant establishes a fundamental framework of constitutive synthetic *a priori* principles and concepts on which the science of metaphysics can be grounded. For example, in Kant's theoretical philosophy, the analogies of experience (and other pure principles of the understanding) play a coordinating, or "schematizing", role – they specify how the categories of the understanding that fall within the purely formal stratum apply to experience – and are at the same time constitutive of experience and of our knowledge of nature. In Kant's

¹⁴² John Rawls, *A Theory of Justice: Revised Edition* (Cambridge: Harvard University Press, 1999), Section 2. Rawls defines the *concept* of justice as "a proper balance between competing claims" and distinguishes it from "a *conception* of justice as a set of related principles for identifying the relevant considerations which determine that balance", p.9.

¹⁴³ Christine Korsgaard, *Realism and Constructivism in Twentieth Century Moral Philosophy*, pp.115-116. Also see Sources of Normativity, pp.113-114.

practical philosophy, the formulations of the Categorical Imperative have this coordinating/constitutive function – giving objective meaning to the purely formal principles and nominally defined, or indeterminate, concepts at the level of pure formalism. Most importantly, they specify the meaning of the moral law for us as finite rational agents, and connect the determination of the concept of *the good* to conformity with the moral law,¹⁴⁴ and, thereby, also give content to the basic moral concepts, such as *duty* and *right*, etc.. These formulations are, in the first place, the criteria for distinguishing actions and ends that are intrinsically, or in themselves, good from those that are good only insofar as they promote or produce some other end or object.

We can say that the formulations of the categorical imperative first determine the concept of the good by giving determinate meaning to the distinction between its two subordinate concepts – *good as an end* and *good as a means*. In the preface to the *Critique of Practical Reason*, Kant notes a close parallel between the meaning of the term ‘formula’ in reference to the Categorical Imperative and the meaning of the same term in mathematics, where a formula “determines quite precisely what is to be done to solve a problem”.¹⁴⁵ The role of the formulas of the categorical imperative is the same with respect to all duty, says Kant. To put this in terms of the form of science, their role is to determine precisely what is to be done in order to act from duty, making possible a

¹⁴⁴ “[A] critique of the Analytic of reason, insofar as it is to be a practical reason... must begin from the *possibility of practical principles a priori*. Only from these could it proceed to *concepts* of objects of a practical reason, namely, **to the concepts of the simply good and evil, in order first to give them in keeping with those principles (for, prior to those principles these cannot possibly be given as good and evil by any cognitive faculty)**, and only then could the last chapter conclude this part, namely the chapter about the relation of pure practical reason to sensibility and about its necessary influence upon sensibility to be cognized *a priori*, that is, about moral feeling. **Thus the Analytic of practical pure reason divides the whole sphere of all the conditions of its use quite analogously with that of theoretical reason, but in reverse order.**” (KpV 5:89-90, my bold)

¹⁴⁵ (KpV 5:8 fn).

transition from concept to conception, from nominal to real definitions of *duty*, *good*, *right*, etc.

Moreover, the formulations of the Categorical Imperative (insofar as their progression shows the moral law to be the law of freedom) present the Categorical Imperative as a principle that makes possible the transition from the negative or nominal definition of freedom belonging to the purely formal stratum to the positive or real definition of freedom as autonomy of the will “deduced” or established as a “fact” in the *Critique of Practical Reason*. In the *Critique of Pure Reason*, Kant describes the three transcendental ideas – God, freedom, and immortality – as problems that are ultimately directed at a set of questions that have to do with the *practical* use of pure reason, “**what is to be done** if the will is free, if there is a God, and there is a future world?”¹⁴⁶ The categorical imperative now determines precisely *what is to be done to solve the problem* of freedom, specifying the only possible positive *conception* of freedom – its real definition as autonomy of the will – for a *mere concept* of theoretical reason and for the negative *concept* of freedom which declares it as a project for practical reason. Kant answers the other two questions in the Dialectic of the *Critique of Practical Reason*, where he argues that the moral law gives objective practical meaning to the ideas of God and immortality.

Finally, at the third level there are particular substantive elements of the theory – the particular principles of the metaphysics of nature (e.g., the “special metaphysics”, such as the metaphysics of corporeal nature Kant develops in the *Metaphysical Foundations of Natural Science*) and the metaphysical first principles of virtue and right (discussed in the *Metaphysics of Morals*), as well as principles of transition from the

¹⁴⁶ (KrV A800/B829, my emphasis).

metaphysics of nature to physics and particular ethical requirements that apply *a priori* duties to cases of experience in the science of morals.¹⁴⁷

2.4

We have seen that Kant draws a formal (or structural) analogy between the Newtonian conception of universal gravity as the force that binds and unifies the universe and the categorical imperative as the law of freedom that binds and unifies rational beings into the ethical state. Kant's analogy suggests a further parallel between the form of his science of morals and the form of Newton's "system of the world", which I sketch in the remainder of this chapter. While this involves a brief consideration of Kant's understanding of Newton's approach in *Principia*, I am not leaving the discussion of Kant's practical philosophy behind. My aim is simply to indicate a way in which reflection on Kant's methodological Newtonianism leads to a new perspective on an apparently problematic aspect of his moral theory – the duty to promote the highest good – and its relation to Kant's view of moral objectivity. What I offer here is a mere promissory note to be cashed out in chapter 6.

Newton conceives the three laws of motion as axioms that specify the general concept of force (or natural power) in terms of motions of physical bodies within a spatio-temporal framework based on an *antecedently well-defined* concept of absolute space. In his work on Kant's relationship with the exact sciences, Michael Friedman points out that Newton takes these laws as *stating facts* about the true or absolute motions (concepts defined by reference to absolute space).¹⁴⁸ One of the central aims of Newton's

¹⁴⁷ See (Mds 6:468).

¹⁴⁸ See Friedman, *Kant and the Exact Sciences*, Chapter 3.

Principia is to show how true motions can be inferred from observable, initially merely apparent, motions of bodies in the solar system and forces viewed as causes and effects of true motions (among other things, in order to prove that Earth rotates around the Sun).

For Kant, however, the laws of motion are, in a sense, technical-practical rules for the *construction* of the spatio-temporal framework of Newtonian physics. On Friedman's view, which I find convincing, Kant re-conceives Newton's argument for inferring the true motions from their observable effects as a *constructive procedure* for first *determining* or *defining the concept* of true motion. He conceives absolute space as an idea of reason¹⁴⁹ that both plays a necessary regulative role in this construction and is given empirical significance through it. Instead of stating facts about true motions the concept of which is already well-determined, Kant thinks of the laws of motion as conditions that first make an objectively valid (or empirically significant) concept of *true* motion possible. In other words, the true motions are just the motions that satisfy these laws.

Friedman shows, for example, that in the *Metaphysical Foundations* Kant uses Newton's third law – the law of equality of action and reaction – to figure out the center of mass of a system of interacting bodies in order to specify a privileged frame of reference for defining true motions in such a system.¹⁵⁰ The initial definition of the concept of true motion goes through an infinite series of ever closer approximations to the ideal limit – the privileged frame of reference defined by “the common center of

¹⁴⁹ Kant writes, for example, “It [absolute space] cannot be an object of experience, for space without matter is no object of perception, and yet it is a necessary concept of reason, and thus nothing more than a mere idea.” (MFNS 4:559)

¹⁵⁰ Friedman, *Kant and the Exact Sciences*, p.143.

gravity of all matter”.¹⁵¹ This process is approximative because we forever expand our knowledge of the system of interacting bodies with reference to which the definition of true motion is given, starting with our position on earth, then moving to the center of mass of the solar system, then expanding the reference frame to the Milky Way galaxy, then to the cluster of galaxies and so on *ad infinitum*. Kant thinks of absolute space as an idea of reason¹⁵² precisely because this ideal end-point can never be actually reached but only continuously approximated through the “progress of experience” over time. Yet, we can still think of this idea as having *objective meaning* given through the constructive procedure for the ever better approximation of the center of mass frame of the universe. That is, Kant conceives of absolute space as an idea of reason whose empirical meaning is specified by an infinite convergent series of ever larger relative spaces or frames of reference.¹⁵³

In keeping with the methodological requirement of “*hypotheses non fingo*”, Kant’s own *Metaphysical Foundations of Natural Science* starts out with only *indeterminate* concepts of matter (as “movable in space”) and of motion – we may say that it begins with their nominal definitions that *declare* a project of giving determinate content to the empirical concepts of matter and of true vs. relative motion. It then specifies a process

¹⁵¹ (MFNS 4:563).

¹⁵² (MFNS 4:559).

¹⁵³ Since central concepts of Newtonian physical science, such as concepts of true and relative motion, force, and the concept of matter itself (as “movable in space”) are dependent on the concept of absolute space, they receive ever more determinate empirical significance through this approximative process. Our understanding of particular empirical laws that employ these concepts is likewise always being “tuned” and systematized through the practice of scientific inquiry, which, according to Kant, aims to approximate the regulative ideal of the complete science of nature. Thus, Kant sees Newtonian natural philosophy as seeking to provide objective meaning to the distinction between true and relative motion, which is necessary in order for the concept at the heart of physical science – the abstract concept of matter – is to have empirical significance.

that gradually determines these concepts, giving them ever more specific objective meaning. For this reason, the theory has to start out, in addition to its mathematical part, with the fundamental axioms or laws of motion that first give meaning to the distinction between true and relative motion. This basic framework enables Newton to deduce the law of universal gravity by applying the laws of motion to the mathematically described phenomena. On Kant's interpretation of Newtonian physics, the laws of motion, together with the law of gravity, make possible the constructive procedure for approximation of the privileged frame of reference corresponding to the idea of absolute space.

We can see Kant take an analogous path in his practical philosophy. Kant's rejection of the method of hypotheses, and his appropriation of the Newtonian principle that analysis must precede synthesis, make it clear that he takes intrinsically good actions to be just those that satisfy the moral law for the same methodological reasons that he takes the true motions to be just those that satisfy Newton's three laws – the same reasons that motivate the new Newtonian model of science and scientific method in general.

Moreover, as he argues in the *Critique of Practical Reason*, the moral law (that first determines the concept of *the good* and gives meaning to the distinction between absolute and relative good) grounds the duty to work towards practical approximation of the ideal of the *highest good* as the complete object of pure practical reason. This duty assumes only an indeterminate concept of this object and demands both its gradual approximative articulation and construction through humanity's collective activity through history.

In chapter 6, I consider the relationship between the idea of the moral law and the concept of the highest good and examine what it means for Kant's justification of morality and for the objective validity and content of particular moral requirements and

ordinary moral judgments. I hope to show that through the duty to promote the highest good, pure practical reason regulates the progressive construction of the actual ethical community and enables the gradual development of the third, applied, level of the science of morals.

On this view, we can think of ordinary moral judgments made by reasoning under the categorical imperative as *best possible approximations* to the ideal of objective goodness embodied in the idea of the highest good. They are approximations because of the state of development of our own moral capacities, both cognitive and motivational (as Kant rather harshly puts it, “in human beings all good is defective”¹⁵⁴), and because of the imperfect condition of the world we live in. The objectivity of our moral judgments develops with the moral and cultural improvement of humanity as a whole, which can only be achieved through co-deliberation and collective action. The categorical imperative specifies the *formal conditions* of the possibility of a shared moral world as the “privileged frame of reference” with respect to which objectively good ends can first be specified. The ongoing shared practice guided by the ideal of the highest good provides the *material conditions* for its possibility and, thus, for the possibility of ever better practical judgments.

¹⁵⁴ (KpV 5:77).

Chapter 3

Kant's Methodological "Newtonianism" vs. Goethe's Method and Conception of Science

So far, I have argued that Kant takes the Newtonian method in natural science as a model for his own critical philosophy, both theoretical and practical. I begin this chapter by considering why one may doubt that the Newtonian method is indeed best suited to the task of the critical project in general, and to practical philosophy in particular. Given that later German Idealists, and Hegel above all, find Kant's method to be problematic and its deficiencies central to what is wrong with Kantianism, I will use this question as a starting point for engaging with Hegel's criticisms of Kant's practical philosophy in a way that systematically connects Hegel's critique to his rejection of Kant's critical method.

The approach I take is structured by the idea that Hegel's polemic against Kant's moral theory is fundamentally a disagreement about the nature of scientific method and of philosophy as a science. While Kant's method and conception of science has the key characteristics of the Newtonian approach, Hegel's alternative conception is in important ways influenced by Goethean methodological ideas, and we can get a better grasp on how these conceptions clash when we consider Goethe's strident opposition to Newtonianism, which Hegel clearly shared.

My aim is to show that placing Hegel's criticisms of Kant in this context allows some progress to be made towards adjudicating their long-standing dispute. Even the best attempts to answer individual Hegelian objections prove to be less than effective at putting this dispute to rest precisely because, in taking Kant's and Hegel's practical

philosophy as mainly self-standing and independent of methodological and architectonic concerns, they tend not to engage with the fundamental questions these objections, however imperfectly, express. Charging the Hegelian tradition of criticism with being “based on mistakes of interpretation and a certain narrowness of philosophical imagination”¹⁵⁵ simply elicits “likeminded” Hegelian rejoinders.^{156,157} As a result, the Kantian/Hegelian debate reminds one of the infamous “battlefield” of rival ideas of the kind Kant himself sought to overcome – a combat “in which no participant has ever yet succeeded in gaining even so much as an inch of territory, not at least in such manner as to secure him in its permanent possession”.¹⁵⁸

Instead of focusing on misinterpretations, some of which no doubt can be found, I want to consider the merits of the two very different conceptions Kant and Hegel have of what constitutes a fully critical self-investigation of reason, how it ought to proceed if it is to result in genuinely objective knowledge and establish philosophy as pure rational science. If their differences can be traced to a fundamental difference in methodology, we cannot adjudicate between them without a good understanding of the methodological dispute itself.

¹⁵⁵ Herman, Barbara. *Moral Literacy*, pp.2-3.

¹⁵⁶ For a Hegelian account of some twists and turns in the Hegelian/Kantian dispute see, for example, Fabian Freyenhagen, “The Empty Formalism Objection Revisited: §135R and Recent Kantian Responses” in *Hegel’s Philosophy of Right*, ed. by Thom Brooks, pp. 43-72. Also see, for example, Sally Sedgwick, *Hegel’s Critique of Kant: From Dichotomy to Identity*, 3.1-3.2, pp.72-77.

¹⁵⁷ Some important recent accounts of Hegel’s critique of Kant’s moral thought do emphasize that it must be treated against the broader background of Hegel’s rejection of Kant’s basic philosophical commitments. Yet, even the best of these accounts do not go far enough in their analysis of the differences between Hegel’s and Kant’s specifically methodological and architectonic commitments, which, in my view, play a fundamental role in the dispute. Here I am thinking, for example, of Sally Sedgwick’s recent account in *Hegel’s Critique of Kant: From Dichotomy to Identity*, Allen Wood’s *Hegel’s Ethical Thought*, Fredrick Neuhouser’s *Foundations of Hegel’s Social Theory*, and Christopher Yeomans’s *The Expansion of Autonomy* among others.

¹⁵⁸ (KrV bxiii).

In this chapter I focus mainly on Goethe's objections to the Newtonian method as well as his positive views on the nature of scientific inquiry. In the next chapter, I connect Goethe's methodological views to Hegel's conception of philosophical science. If, in the end, there are good reasons to think that Kant's approach in moral philosophy is not only warranted, but also more attractive than the Hegelian alternative in terms of its intended aim – showing that morality is not an external imposition on our will as particular persons with needs, interests, and inclinations that often present a “powerful counterweight”¹⁵⁹ to moral demands, but is essential to our nature and its realization – these same reasons will provide a basis for a systematic answer to the Hegelian critique.

1. Kant's Newtonian methodology – possible questions of fit

1.1

Let me begin by considering why one might raise questions about Kant's methodology. The first two chapters were set in motion by Kant's claim in the *Critique of Pure Reason* that metaphysics can be put on a secure foundation and become pure rational science only after pure reason “*catalogs* an entire outline of the science of metaphysics, both as regards its boundaries and as regards *its entire internal structure*”.¹⁶⁰ This prior self-investigation of reason must proceed, on the model that parallels that of “the geometers and physicists”, by instituting “a *tribunal* which will assure to reason its lawful claims, and dismiss all groundless pretensions, *not by despotic*

¹⁵⁹ (G 4:405).

¹⁶⁰ (KrV bxxii).

decrees, but in accordance with its own eternal and unalterable laws. This tribunal is no other than the critique of pure reason itself."¹⁶¹

The Baconian language of conducting scientific inquiry through a tribunal, in which reason serves as its own appointed *judge*, permeates Prefaces of both editions of the *Critique of Pure Reason*. As natural scientists already recognize, says Kant, we can learn from nature only if we approach it with our own rational plan and thought-out principles. We should not let reason be a mere pupil of nature by simply classifying and recording whatever data we happen to observe¹⁶², since this could never result in discovery of necessary laws that science seeks. Metaphysics, however, is concerned with pure *a priori* thought and is the field "where reason, thus, is supposed to be its own pupil "¹⁶³

Thus, in the critique that grounds metaphysics reason has to be both its own pupil and its own "appointed judge," both discovering its own fundamental principles and presiding over a tribunal at which the validity of these principles and a general form of metaphysics can be established. Although Kant's description of reason as judging itself is a familiar characterization of the method of critique, it is rather puzzling. For it raises the following question: if every aspect of reason is subject to its own critique, according to which principles and criteria is reason to judge its fundamental principles and criteria? The self-investigation of reason is supposed to thoroughly critically examine reason in *all* its

¹⁶¹ (KrV axi-xii).

¹⁶² In *New Organon*, Bacon himself compares an experimenter engaged in the research of this kind – merely compiling so-called natural or experimental histories – to an ant, insofar as he "take[s] the material that he gathers from natural history and physical experiments and store[s] it up in his memory just as he finds it". (*New Organon*, I.95). In contrast, Bacon writes, a true scientist resembles a bee that "gathers its material from the flowers of the garden and the field, but uses its own powers to transform and absorb this material." "A true worker at philosophy," he adds, "stores the material in his intellect, altered and brought under control." (Ibid.)

¹⁶³ (KrVb xiv).

aspects, without simply positing or taking for granted any of its principles. In the first two chapters, I have argued that Kant's method has the key features of the Newtonian approach to scientific investigation. Generally speaking, this is the method of analysis of experimental situations followed by synthesis. Analysis begins with what is certain and can be taken *as given* and proceeds to separate *a priori* from empirical and contingent aspects of this material, in order to seek out the fundamental formal laws that govern a particular scientific domain. Synthesis systematically brings together the elements discovered through analysis and examines the conclusions their unity entails. If this is correct, then it seems that Kantian critical philosophy takes for granted the validity of this method and its presuppositions (most important of which is the presupposition of strict separability of form and content, of fundamental formal *a priori* principles and that to which they apply). While the coherence of a resulting system of philosophy may speak in favor of this method, one might argue that this is not enough to justify it as the way of arriving at a genuine objective self-knowledge of reason, especially if Kant's methodological presuppositions can be plausibly challenged. I will say more about some of these challenges later in the dissertation. For now, I simply want to sketch an outline of a possible problem for Kant's critical methodology.

1.2

The question of whether Kant's method is warranted may also be raised from another perspective. Considering that throughout his critical writings Kant uses organic analogies to describe the systematic unity and self-developing nature of reason, it seems reasonable to ask whether a method modeled on that of Newtonian natural science (science whose

subject is lifeless matter) is suited for this task. In the B Preface of the first *Critique*, for example, Kant compares reason to an organized body:

“[P]ure speculative reason is, in respect of principles of cognition, a unity entirely separate and subsisting for itself, in which **as in an organized body**, every part exists for the sake of all others as all the others exist for its sake, and **no principle can be taken with certainty in one relation unless it has at the same time been investigated in its thoroughgoing relation to the entire use of pure reason...**” (KrV bxxiii, my emphasis)

“[T]he nature of pure speculative reason...contains **a truly articulated structure of members** in which **each thing is an organ**, that is, in which everything is for the sake of each member, and each individual member is for the sake of all, so that even the least frailty, whether it be a mistake (an error) or a lack, must inevitably betray itself in its use.” (KrV bxxxviii, my emphasis)

In a similar vein, in the last part of the first *Critique*, the Transcendental Doctrine of Method, Kant compares the complete system of knowledge (theoretical and practical) with an animal body, which grows or develops according to its inner end and form and “whose growth does not add a limb but rather makes each limb stronger and fitter for its end without any alteration of proportion”.¹⁶⁴ We also find a number of organic metaphors in the *Prolegomena*, which describes the method of the *Critique* as based “**on no data except reason itself**, and which therefore seeks, **without resting upon any fact, to unfold knowledge from its original germs**”.¹⁶⁵ The “original germs” are the categories of the understanding, which the Transcendental Deduction describes as “the grounds of the possibility of all experience” that enable “a system of the *epigenesis of pure reason*”.¹⁶⁶

¹⁶⁴ (KrV A833/B861).

¹⁶⁵ (P 4:275, my emphasis).

¹⁶⁶ (KrV B167).

Epigenesis was an emerging type of “dynamic” biological theory of Kant’s time, important versions of which were developed by Kant’s contemporaries Caspar Wolff and especially Johann Blumenbach, whose work received particular praise in the *Critique of Judgment*. Although there is some disagreement about Kant’s own conception of epigenesis, and his thinking about this kind of explanation had apparently evolved in his later works, it seems fair to say that already in the beginning of the critical turn Kant understands epigenesis as a theory of “generic preformation”¹⁶⁷, according to which the characteristics of a mature organism are gradually developed through a complex interaction of its genetic potentialities, or “inner purposive capacities” inherent in the lineage of its species, and empirical conditions, in which the organism lives. According to this theory, an individual organism does not come fully formed in an embryo (as the rival theory of “individual preformation” or of “involution” holds), but rather its germ contains only the *formative power* to form itself in its material environment. In other words, an organism develops into something new through its life activity viewed as an interaction of the specific form (germs or potentialities belonging to a given species) and the environment, moved and guided by a “formative drive” (*Bildungstrieb*, as Blumenbach calls it). Blumenbach conceived *Buiddungstrieb* as containing its aim – the realization of the form of a living being – in itself.¹⁶⁸ For Kant, the theory of epigenesis offers a useful model for thinking not just about organic activity and development, but also about active faculties of mind in general. As Anthony Genova and John Zammito point out, for

¹⁶⁷ (KU 5:423).

¹⁶⁸ In the *Critique of Judgment* Kant suggests that, from the philosophical standpoint, this type of biological explanation has a great advantage since it regards nature as self-producing and self-regulating, and in that sense, biologically autonomous, rather than as a merely “passive,” stimulated or prodded development of characteristics that are already fully pre-formed or pre-imprinted in its germ at the time of Creation.

example, Kant takes the inextricably interconnected fundamental characteristics of biological epigenesis – the *de novo* emergence of individual characteristics, self-organization, and organic community through which the genetic principles are developed and transmitted¹⁶⁹ – to be, in a sense, empirical analogs of the central characteristics of his conception of reason – reason’s autonomy or spontaneity, systematicity, and publicity (including the idea that the very existence of reason depends on the freedom to communicate and to reach agreements between free citizens).¹⁷⁰

Kant’s analogical characterization of a system of pure reason as epigenetic points to a conception of reason as an organically-unified active faculty that contains its own “formative drive” – as a faculty that is self-governing and self-developing. The system of pure reason is an articulated (not heaped together) unity of all cognitions under a single idea, which Kant calls “the scientific rational concept”.¹⁷¹ This idea (the basis and the plan, as it were, for the science of metaphysics) is said to contain *the end and the form of the whole* of the system, determining *a priori* the legislative domains of our cognition and outlining how different parts of reason are related to each other and to the highest end of reason as a whole – the realization of freedom in the world.¹⁷²

The question about the possibility of a critique of pure reason employing Newton-inspired methodology may arise when Kant’s thinking of reason as analogous to an organized body is considered in light of his arguments in the *Critique of Judgment* about

¹⁶⁹ See John Zammito, *The Genesis of Kant’s Critique of Judgment*, p.82.

¹⁷⁰ (KrV A738/B766).

¹⁷¹ Kant identifies articulation with systematic unity (KrV A835/B863) and system with “the unity of the manifold cognitions under one idea,” which is “the rational concept” (KrV A833/B861).

¹⁷² See, e.g., (KrV A840/B868).

the impossibility of acquiring *knowledge of natural ends* (such as living beings) *qua natural ends* and, more generally, of the nature of organized and self-organizing beings, *as such*. A natural object is a *natural end*, says Kant, if “its parts reciprocally produce each other, as far as both their form and their combination is concerned, and thus produce a whole out of their own causality, the concept of which, conversely, is in turn the cause ... of it in accordance with a principle”.¹⁷³ We think of a natural end *as such* in terms of purposiveness intrinsic to the natural thing. A natural end is an organized and self-organizing being – a being in which everything is an end and reciprocally a means,¹⁷⁴ and which possesses in itself “a self-propagating formative power”.¹⁷⁵

According to Kant, we cannot even think of an organized and self-organizing being without appealing to teleological notions, even though such notions cannot be employed constitutively in natural science. Descriptions and explanations in terms of efficient causality, which is the domain of mechanical principles, are inadequate for knowledge of organized natures. The mechanism is deficient in this respect because it is concerned only with the so-called “motive powers” (forces that cause motion of physical bodies in space) which can be explained through a capacity for movement alone, a capacity that cannot explain the “self-propagating formative power” characteristic of organisms.¹⁷⁶ Thus, Kant famously writes,

¹⁷³ (KU 5:373).

¹⁷⁴ In the *Critique of Judgment*, Kant describes the organized thing as a thing in which the parts “produce a whole out of their own causality” and, in turn, the idea of the whole determines “the form and combination of all the parts: not as a cause – for then it would be a product of art – but as a ground for the cognition of the systematic unity of the form and the combination of all of the manifold that is contained in the given material for someone who judges it” (KU 5:373).

¹⁷⁵ (KU 5:374).

¹⁷⁶ (KU 5:374).

“[I]t is quite certain that **we can never adequately come to know** the organized beings and **their internal possibility** in accordance with merely mechanical principles of nature, **let alone explain them**; and indeed this is so certain that we can boldly say that **it would be absurd for humans even to makes such an attempt** or to hope that there may yet arise a Newton who could make comprehensible even the generation of a blade of grass according to natural laws that no intention has ordered; rather, we must absolutely deny such insight to human beings.” (KU 5:400, my emphasis)

But, the mechanical inexplicability of organisms seems to have a more fundamental source which Kant does not explicitly discuss – our inability fully to understand and explain self-organizing and self-producing entities in terms of *formal* laws connecting universal attributes arrived at through analysis.¹⁷⁷ That is, the source of the difficulty with scientific knowledge of organic beings *as such* lies (at least in part) in the Newtonian “two-stage” model of *analysis followed by synthesis*.

Here is why I think this is the case. The causal descriptions and explanations Kant has in mind are products of the scientific method Newton describes in *Opticks* where we first

“proceed **from Compounds to Ingredients**, and from Motions to the Forces producing them; and in general, **from Effects to their Causes**, and from particular Causes to more general ones, **till the Argument end in the most general**. This is the Method of Analysis: And the Synthesis consists **in assuming the Causes discover'd and establish'd as Principles**, and by them explaining the Phænomena proceeding from them, and proving the Explanations.” (Newton, *Opticks*, Book III.380, my emphasis)

The first thing to observe about this procedure is that it relies on a number of abstract metaphysical categories – compounds and ingredients, cause and effect, and the like. The principles and definitions “discovered” at the analytic stage of the procedure, as well as

¹⁷⁷ Recall that analysis abstracts from contingent and particular aspects of the object of study, gradually specifying its most general (and, therefore, most amenable to formalization) characteristics and relations between them, expressing the unknown in terms of the known and, in the case of natural sciences, the mathematically quantifiable (e.g. forces in terms of motions). In this way, analysis establishes the formal framework of the theory.

natural-philosophical explanations and their proofs provided in the subsequent synthetic stage, are given in terms of these categories.

Furthermore, analysis presupposes that for every effect there is a cause (or, more generally, for every consequence there is a ground) and that this cause is different from the effect – it allows for explanations of effects in terms of causes (or consequences in terms of grounds) that is strictly linear, one-directional. When something is both a cause and an effect of itself, analysis cannot arrive at the fundamental grounds and, therefore, cannot provide a proper basis for explanations in terms of such grounds or for demonstrations of their truth.¹⁷⁸ It follows that analysis that attempts to *make comprehensible* the nature of an organized being could never come to a stop and cannot, *a fortiori*, ground its explanation.¹⁷⁹ And no formal principle or definition discovered through analysis can be taken as *the fundamental* principle that governs the nature of this kind of being or explains its “internal possibility.”

In the previous chapters, I have tried to show that Kant’s critical investigation of reason (in both theoretical and practical spheres) seeks the fundamental *a priori* rational

¹⁷⁸ I take this thought to be implicit in Kant’s comparison, in the *Critique of Judgment*, between explanations in terms of efficient causes and the way we think of causality governing a self-productive nature of an organized being: “The causal nexus, insofar as it is conceived merely by the understanding, is a connection that constitutes a series (of causes and effects) that is **always descending**; and the things themselves, which as effects presuppose others as their causes, **cannot conversely be the causes of these at the same time**. This causal nexus is called that of efficient causes (*nexus effectivus*). In contrast, however, a causal nexus can also be conceived in accordance with a concept of reason (of ends), which, if considered as a series, would carry with it **descending as well as ascending dependency**, in which the thing which is on the one hand designated as an effect nevertheless deserves, in ascent, the name of **a cause of the same thing of which it is the effect**....Such a causal connection is called that of final causes (*nexus finalis*). The first could perhaps more aptly be called the connection of real causes, and the second that of ideal ones.” (KU 5:372-3, my emphasis)

¹⁷⁹ I take this argument to be similar to Aristotle’s criticism of the notion of circular or reciprocal scientific demonstration (in which all premises are also demonstrated conclusions) in *Posterior Analytics*, “[W]e say...that it is impossible to demonstrate *simpliciter* in a circle is clear, if demonstration must depend on what is prior and more familiar; for it is impossible for the same things at the same time to be prior and posterior to the same things...Hence it results that those who assert that demonstration is circular say nothing but that if A is the case A is the case. And it is easy to prove everything in this way.” (*Posterior Analytics* I.3, 72b5-73a5)

grounds of its own active nature and that it aims to comprehend this nature through a method that is modeled on Newtonian analysis followed by synthesis. If, however, reason is to be thought as a kind of organic unity and organic systems cannot be fully *known* as such through formal laws, it may become unclear how we can come to have *complete* and *objective* knowledge of reason by using this method.

This putative tension in the standpoint of Kantian critique cannot be resolved by claiming that Kant's comparison of reason with an organized being is merely an analogy. For the only kind of analogy Kant allows in philosophical inquiry is a *structural* or *formal* analogy which he describes in *Prolegomena* as one that "does not signify (as is commonly understood) an imperfect similarity of two things, but a perfect similarity of relations between two quite dissimilar things."¹⁸⁰ In this case, it signifies a *structural* similarity (a perfect similarity of relations of *inner purposive self-organization*) between reason and an organized being – both are taken to *possess a self-propagating formative power and be unified through it*. So the question stands. Given that we cannot know self-organizing natural beings *as such* through mechanical principles (and, as I have suggested, in general, through merely formal principles and definitions) established with the help of the Newtonian method, why should we think that the formal laws of reason established through the parallel procedure of the *critique* will allow us *completely* and *objectively* to cognize the formally analogous nature of reason, on Kant's own conception?

1.3

Now, we may plausibly question whether this concern is applicable to the way Kant proceeds in analyzing cognition into its several faculties and considering their formal

¹⁸⁰ (P 4:377-8).

contributions to our reason as a whole, and to his view of what critical philosophy is supposed to accomplish. We may suggest, for example, that Kant's comparison of pure reason with an organized being points towards the similarity between the kind of analysis in which he is engaged and the dissecting work of an anatomist committed to explaining the functioning of an organism in terms of the functioning of its parts, for example. It was certainly not uncommon for the moderns to compare the method of analysis (“*anatomia cognitionis*”¹⁸¹) with anatomical investigation. The anatomist's dissections and her entire anatomical investigation is regulated by the assumption that the parts she identifies and the causal roles she ascribes to them must conform to the principle of organic unity: the organism as a whole is thought as the cause and effect of itself, and each of its parts is thought *as an organ* insofar as it is both causally important to the functioning of all other parts, and itself causally sustained by their functioning. Similarly, we may say that Kant's self-investigating analysis of reason in his three *Critiques* is always *regulated* by the idea that its parts and elements must form a whole (that the two stems of our cognitive power – understanding and sensibility – must have a common root, that pure reason must be a unity underlying the powers of theoretical and practical reason, for example). Understood along these lines, the Newtonian method is not in conflict with Kant's conception of reason as organically unified, since the project of analysis is consistent with the idea that the system being analyzed is purposive. On the contrary, the project must be guided by this idea. Note however, that this does not guarantee that the *complete* self-knowledge of reason (the complete science of metaphysics) *qua organic unity* can actually be reached. But if one takes the *complete* self-knowledge of reason (the complete science of

¹⁸¹ See, for example, Georg Friedrich Meier's book on logic abridged for courses, which Kant used in his own logic lectures for almost forty years, (Meier, *Auszug aus der Vernunftlehre*, §139).

metaphysics) *qua organic unity* to be a task philosophy *must* actually accomplish in order to lay claim to fully *objective* truth about reason, one may question whether the Newtonian method is fit to the task. Indeed, this becomes one of the central issues for Post-Kantian German Idealists.

Although in the *Critique of Pure Reason* Kant explicitly sets complete structure of the system of pure reason and its activity as one of his chief aims¹⁸², in his later critical works he seems to consider complete self-knowledge of reason as yet unfulfilled goal of philosophy, and, on some readings, even a regulative ideal – something that can only be ever closer approximated but never reached.¹⁸³ In the *Critique of Practical Reason*, he remarks, for example, that although seeking insight into the unity of the whole of the faculty of pure reason (theoretical as well as practical) and deriving everything from one principle is “an undeniable *need* of human reason, which only finds complete satisfaction in a perfectly systematic unity of its knowledge”,¹⁸⁴ complete satisfaction of this need remains at least a distant *hope*, rather than an actual achievement of critical philosophy.¹⁸⁵ Some early proponents of Kantian philosophy, particularly Reinhold and

¹⁸² Recall, for example, that in the Preface to the first edition of the *Critique of Pure Reason*, Kant writes: “Now metaphysics, according to the concepts we will give of it here, is the only one of all the sciences that may promise that little but unified effort, and that indeed in a short time, will complete it in such a way that nothing remain to posterity except to adapt it in a **didactic** manner to its intentions, yet without being able to add to its content in the least.” (KrV axx). In the second addition, he notes that the *Critique* can “lay [its work] down **for posterity as a principal framework that can never be enlarged**, since it has to do solely with principles and the limitations on their use, which are determined by the principles themselves. Hence as a fundamental science, metaphysics is also bound to achieve this completeness...” (KrV bxxiv, my emphasis). Also, see, e.g. (KrV axii-axiii), (P, 4:261).

¹⁸³ For one such interpretation, see Frederick Neuhouser, *Fichte’s Theory of Subjectivity*, pp.22-23.

¹⁸⁴ (KpV 5:91).

¹⁸⁵ After drawing some structural parallels between the Analytic chapters of the first two *Critiques*, Kant suggests that such comparisons “rightly occasion the expectation of **perhaps being able some day** to attain insight into the unity of the whole pure rational faculty (theoretical as well as practical) and to derive everything from one principle...” (KpV 5:91, my emphasis).

the early Fichte, see this kind of claim as confirmation of their conviction, and, perhaps, as Kant's own reluctant admission, that critical philosophy requires further, and more rigorous, systematization and completion.¹⁸⁶ They believe this systematization and completion is necessary, in the first place, in order to give Kantian philosophy (and its central concepts, including the categories of the understanding, the moral law, etc.) a more definitive grounding than Kant himself was able to provide. Moreover, a number of Kant's German Idealist successors and critics, and Hegel in particular, come to hold that objectivity and truth of *any* philosophical claim, in general, depends in part on philosophy's attaining this *complete* knowledge of reason as a self-subsisting, self-determining whole.

Indeed, as I hope to show later in the dissertation, for Hegel, a conception of philosophical science and its method based on the Newtonian model is in principle incompatible with achieving this goal. Since Kant adopts the Newtonian methodological outlook, completeness, and genuine objectivity, can only be a regulative ideal for his theory.¹⁸⁷ The suggested comparison between Kant's critical approach and the work of an anatomist already points to some reasons why this is so. Considered alongside Hegel's own anatomical analogy, this comparison highlights just how deeply Hegel's objection aims to reach. As we shall see, Hegel argues that the "two-stage" Newtonian-style methodological procedure of analysis/synthesis cannot be used adequately to describe or explain not only organic life (its self-maintenance, development, transformation,

¹⁸⁶ Here I benefit from Karl Ameriks's work on the Post-Kantian reaction to Kant's philosophy (see, for example, *The Practical Foundation of Philosophy in Kant, Fichte, and After*, in "The Reception of Kant's Critical Philosophy: Fichte, Schelling, and Hegel" edited by Sally Sedgwick), as well as Frederick Neuhausser's discussion of the reception of Kant's philosophy in *Fichte's Theory of Subjectivity*, pp.21-23.

¹⁸⁷ The same point applies to different extents to Reinhold and Fichte, insofar as each of them aims to complete Kant's project, and to the degree to which each of their philosophical systems retains aspects of the Newtonian model and shares its presuppositions.

reproduction and other organic functions), but anything that is, at least to some extent, independent of mere mechanical causes, that is, anything that is self-sufficient, self-organizing, self-productive, and self-active in general. The problem starts at the analytic stage of the procedure. When applied to anything living or active, he writes in the *Encyclopedia Logic*, analysis “really transforms the concrete into an abstract. And as a consequence of this change, the living thing is killed: life can exist only in the concrete and one”.¹⁸⁸ This is because analytic investigation is in the first place an activity of the understanding which proceeds through comparison, reflection and abstraction, whose static, abstract universal forms cannot be used to grasp the inner purposiveness and living activity of organisms. Importantly, Hegel extends this point to knowledge of the mind, and to philosophical knowledge in general:

“The relation of whole and parts, being the immediate relation, comes easy to reflective understanding: and for that reason it is often satisfied, when the question really turns on profounder relationships. The limbs and organs for instance, of an organic body **are not merely parts of it: it is only in their unity that they are what they are, and they are unquestionably affected by that unity, as they also in turn affect it.** These limbs and organs become mere parts, only when they pass under the hands of an anatomist, whose occupation be it remembered, is not with the living body but with the corpse. **Not that such analysis is illegitimate:** we only mean that the **external and mechanical relation of whole and parts** is not sufficient for us, if we want to study organic life *in its truth*. **And if this be so in organic life, it is the case to a much greater extent when we apply this relation to the mind and the formations of the spiritual world.**” (EL §135, my emphasis)

What Hegel seems to say is that analysis that operates with the self-standing, discrete categories of the understanding (where cause stands in immediate and fixed opposition to effect, part to the whole, etc.) will not be able to discover the nature of organic activity

¹⁸⁸ See (EL §38). Hegel adds a quote from Goethe, “Handling nature, says Chemistry now, Mocking itself without knowing how. Then they have the parts and they’ve lost the whole, for the link that’s missing was the living soul.”(EL §38A) Hegel’s quote is from *Goethe, Faust, pt.1 lines 1940-4.*

characteristic of self-producing entities¹⁸⁹. These categories are “external” to the nature of organic entities *as such* and cannot, for that reason, ground knowledge of organic life, as Hegel puts it, “*in its truth*”. One simply cannot arrive at such knowledge by starting with mere analysis. Moreover, the guiding role of the regulative principle of organic unity in analysis is rather indeterminate – it does not specify, for example, how we should approach analyzing the parts with a view of finding out how they are actively contributing to each other’s functioning or the functioning of the whole.

At the level of synthesis, this principle demands that the results of analysis be unified into a system. But, it comes onto the scene too late, as it were, after analysis has already isolated various parts and aspects of the object of study, cutting off natural organic connections between them and making it impossible to capture the inner necessity of organized systems. As a result, attempts to bring the elements discovered through analysis together under the principle of organic unity become, as it were, a *post factum* external and subjective imposition on the nature of the object that cannot lay claim to its truth. Another way to put this Hegelian point is to say that Kant’s method makes it impossible for him to accomplish what he wants to accomplish – namely, to execute the *Critique of Pure Reason* in such a way that “the science [of metaphysics] may present all its articulations, as the structure of a peculiar cognitive faculty, **in their natural combination**”.¹⁹⁰

¹⁸⁹ For example, these categories, and principles based on them, cannot be used fully to explain how and why at a certain point in its quantitative growth a group of cells becomes a qualitatively specific organ or to account for emergent properties of an organic system – properties that arise from non-specific interactions among the components of an organic system where causal responsibility cannot be straightforwardly allocated to individual components of the system.

¹⁹⁰ (P 4:263).

On Hegel's view, if reason, as self-productive, self-organizing thought, is to achieve genuine self-knowledge it must *know* itself as the organic unity that it is. And it cannot know itself as an organic unity through "finite" forms and methods incapable of producing such knowledge. Given that the Newtonian-style analytic/synthetic procedure is not good enough for organic life, it is *a fortiori* not good enough for gaining genuine knowledge of the self-conscious, "spiritual life" of reason.

Now, at this point we have only a general and incomplete sketch of Hegel's complaint. Before I turn to the detailed treatment of what motivates Hegel's methodological views and his criticism of Kant's method it will be helpful to consider an alternative method of scientific investigation that was passionately promoted by Goethe. I will subsequently argue that Goethe's approach to natural science shapes Hegel's views about the proper method for obtaining genuine philosophical knowledge and that Hegel's criticisms of Kant's method (particularly in practical philosophy) are motivated by the same concerns that motivate Goethe's criticism of Newtonianism.

2. Goethe's polemic against Newtonian methodology

2.1

In an essay on Kant and Goethe, Ernst Cassirer makes the following telling observation – it begins with a quote from Goethe himself:

"Kant," says Goethe, "never took any notice of me, although independently I was following a course similar to his. I wrote my *Metamorphosis of Plants* before I knew anything of Kant, and yet it is entirely in the spirit of his ideas."

"*Was ist mit diesem Rätselwort gemeint?*" – "What means this riddle?" we are tempted to ask with Faust, in reading this passage. The words are indeed paradoxical. What has Goethe's *Metamorphosis of Plants* to do with Kant? And how could Goethe say that his conception of nature agreed with Kant's ideas? At first glance we can discover no similarity between them, we see only a sharp

contrast. This contrast can be expressed in two words, "mathematics" and "Newton". (Ernst Cassirer, *Rousseau, Kant, Goethe: Two Essays*, p.61)

When Cassirer expresses the contrast between Goethe's conception of nature and Kant's philosophy in two words "mathematics" and "Newton," he is not in fact marking two separate points of disagreement, but two closely related aspects of a single issue. Goethe's strident criticism of Newtonian physics (optics, in particular) and his rejection of certain uses of mathematics in natural science center on Newtonian method. Newton uses theoretical analysis of the quantifiable aspects of a few well-chosen phenomena to arrive at an *a priori* mathematized set of basic principles which then serves both as a framework within which competing theories can be compared and as a foundation of a true theory. In discussing Goethe's general approach to science in this section, I will primarily focus on this contrast between Goethe's methodology and the Newtonian method. Although Goethe's reading of Kant is, by all accounts, idiosyncratic, I will briefly come back to some of what Goethe and Kant do have in common later in the dissertation when I consider the viability of Hegel's approach to practical philosophy as an alternative to that of Kant.

In addition to producing a number of historically important works in the so-called "descriptive" natural sciences – botany, anatomy, zoology, and geology, Goethe was also deeply engaged with "experimental" physical sciences, where his researches culminated in the development of the theory of color. Goethe's experiments with light and prismatic colors led to the publication of his *Contributions to Optics (Beiträge zur Optik)* in 1791/1792 and later, in a refined and expanded form, to the much more polemical *Theory of Colors (Zur Farbenlehre)* that appeared in 1810. While Goethe reportedly considered his work on color and his opposition to Newtonian optics much more valuable than any

of his literary accomplishments,¹⁹¹ it was received highly unsympathetically by most 19th century physicists. Perhaps due to the development of phenomenological approaches in the sciences and Pierre Duhem's criticism of Newtonian method, and of crucial experiments in particular,¹⁹² there was renewed interest in Goethe's work by at least some 20th century scientists and philosophers of science. Nobel-winning physicist Werner Heisenberg, in his lecture "On the History of the Physical Interpretation of Nature," notes that Goethe's "bitter struggle against Newton's physical optics" and the development of his own theory of color were rooted in Goethe's resistance to the idea that scientific progress requires abandonment of "living and immediate understanding" of nature in favor of ever-more abstract, mathematized theories. Given the way modern physics has proceeded, Heisenberg writes, "It would be superficial to neglect this struggle as unimportant, there is a good reason for one of the most eminent of men using all his power to combat the achievement of Newton's optics."¹⁹³

What are Goethe's reasons? These reasons have to do with two closely related aspects of Newtonian method that seem to place him in stark opposition to the Kantian view – *mathematization* (or formalization) of science and Newton's version of Baconian *experimentalism* with its focus on *crucial experiments*.¹⁹⁴ Let me briefly take up Goethe's polemic on each of these points.

¹⁹¹ Eckermann's *Conversations with Goethe*, February 19th, 1829, p.377.

¹⁹² In particular, see Duhem's *The Aim and Structure of Physical Theory*, 1914.

¹⁹³ Werner Heisenberg, "On the History of the Physical Interpretation of Nature" in *Philosophical Problems of Quantum Physics*, Ox Bow Pr; 2nd Edition (June 1979), p. 37.

¹⁹⁴ Indeed, Goethe clearly recognized Newton's method of crucial experiments as closely related to the mathematization of science. By Newton's version of Baconian experimentalism I mean his particular take on the use of Crucial Experiments. I have argued in Chapter I that while Baconian experimental scientists

2.2

While Kant argues that any proper natural science must be based on mathematics as its *a priori* foundation,¹⁹⁵ Goethe notoriously calls for banishment of all attempts to found natural science on mathematics, or any other formal or *a priori* basis. He rails against the idea that genuine knowledge of the natural world can be adequately captured in mathematical formulas and insists that “[a] strict separation must be maintained between physical science and mathematics”.¹⁹⁶ But, it is important to recognize that Goethe is not hostile to mathematics in general. Indeed, he calls on scientists to learn from mathematical proofs “the meticulous care required to exhibit things in unbroken succession”¹⁹⁷ and, as we shall see, at times even compares his own approach to that of mathematicians. One clue to what Goethe finds problematic in the use of mathematics in science comes from reflecting on the fact that he seems to have no problem with descriptive or phenomenological laws, such as Kepler’s laws of planetary motions¹⁹⁸ or Galileo’s law of free fall. Laws of this kind mathematically describe the relations among certain phenomena, but do not attempt to use mathematics to “deduce” or specify the fundamental forces or causes behind the phenomena. Mathematics can be fruitfully applied *after* the phenomena are fully apprehended through careful and comprehensive

thought of *Experimentum Crucis* primarily as a way definitively to rule out certain theories or hypotheses, Newton *also* stressed its affirmative, and, under certain conditions, even *demonstrative* value.

¹⁹⁵ MFNS (4:470).

¹⁹⁶ Goethe writes, for example: “An important task: to banish mathematical-philosophical theories from those areas of physical science where they impede rather than advance knowledge.” and “It is a false notion that a phrase of a mathematical formula can ever take the place of, or set aside, a phenomenon” (GOS pp.65-67).

¹⁹⁷ (GOS, p.67).

¹⁹⁸ Kepler first came up with his laws with the help of a massive quantity of highly accurate and comprehensive observational data compiled by Tycho Brache.

experimentation. But, on Goethe's view, it can neither determine what kinds of experiments a scientific researcher should care about nor serve as *the foundation* of natural science – as the basis on which all genuine understanding of the natural world must rest. There are at least two reasons for this.

First, mathematics only deals with those aspects of nature and with those phenomenal properties that are quantifiable or measurable. It does not reach to, and cannot completely account for, those aspects that are not amenable to *mathematical formalization*. This includes, in particular, the formative power that governs development, adaptation and other organic functions of living beings. Here, indeed, Goethe seems to be in agreement with Kant. In general, Goethe thinks that mathematization tends to *abstract from*, and ignore, qualitative differences between various kinds of phenomena and phenomenal properties, cutting off, as it were, the possibility of comprehending what is active and living in nature. As he remarks in the preface to the *Theory of Colors*, it is “the *abstraction* we are afraid of”.

Second, for Goethe, attempts to ground our understanding of nature on mathematical principles amount to imposing on the objects of study standards and structures that are *external* to them. With respect to living organisms, in particular, he writes: “The process of measuring is a coarse one, and extremely imperfect when applied to a living object. A living thing cannot be measured by something external to itself; if it must be measured, it must provide its own gauge“.¹⁹⁹ A scientist must approach even inorganic nature in a way

¹⁹⁹ See *GOS* p.66. According to Goethe, mathematics has been misapplied by mathematical physicists like Newton even in their study of non-organic phenomena such as light and color: “I receive mathematics as the most sublime and useful science, so far as they are applied in their proper place...The mathematicians did not find out the metamorphosis of plants. I have achieved this discovery without the aid of mathematics, and the mathematicians were forced to put up with it. To understand the phenomena of colour, nothing is required but unbiased observation and a sound head...” (*GOS* pp.66-67)

that allows him to understand the phenomena *according to their own natural organization* and *presentation (naturgemäße Darstellung)* and without imposing on them some *external* and *artificial conceptual scheme* – the scientist’s own theoretical constructs and prejudices (imposing geometry of rays on our understanding of the nature of light, for example).

Focusing on a select set of quantifiable properties that are presupposed as fundamental puts the proverbial cart (theorizing) before the horse (thorough and comprehensive familiarity with the phenomena). This leads to theories that tend to *mistake mere accidental properties for the essential nature of things* and *reify* mathematical constructions (e.g., posit hidden causes and forces). This is precisely what happens, in Goethe’s view, when, Newton posits white light to be essentially a bundle of differently refrangible rays (rays of differently colored light), failing to recognize light as a fundamental phenomenon that produces colors through interaction with darkness.

2.3

The other (related) aspect of Newtonian method that Kant praises (and makes philosophical use of) and Goethe finds problematic is Newton’s version of Baconian experimentalism, and particularly his use of *crucial experiments*. Baconian scientists thought that nature must be interrogated through the tribunal of experiments that constrain it under conditions not normally encountered in nature, for, as Bacon insists, "the secrets of nature reveal themselves more readily under the vexations of art than when they go their own way."²⁰⁰

²⁰⁰ See *New Organon*, bk.1, §98. In his “Mathematical vs. Experimental Traditions in the Development of Physical Science”, Thomas Kuhn provides the following helpful description of the innovations of the Baconian method which distinguished it from the older empirical modes of inquiry: “[The practitioners of Baconian experimental method] seldom aimed to demonstrate what was already known or to determine a

Goethe's opposition to this approach is rooted in his conception of nature as an organized, self-organizing and self-developing whole.²⁰¹ His view was partly influenced (and, to his mind, partly confirmed) by Kant's *Critique of Judgment*. Goethe was impressed by Kant's claim that we can rightfully extend the concept of a natural end to the *whole of nature*, considering it *as if* it were a self-sufficient organized being – as an idealized “system of ends,” whose parts and the whole reciprocally influence one another.²⁰² For Kant, this idea of nature as a “system of ends” is a *regulative* principle of teleological judgment which does not aim to make *knowledge* claims about the whole of nature as an object of experience or as it is in itself. Its role is to guide scientific investigation in discovering and unifying causal (mechanical) laws towards the ideal of a complete system of scientific knowledge.

It is not entirely clear from Goethe's writings whether he treats this idea as a regulative principle along Kantian lines or as something more metaphysically robust. While the latter is, perhaps, more likely, the former is not inconsistent with his approach to experimental science if the role of this idea is conceived more broadly – as guiding

detail required for the extension of existing theory. Rather they wished to see how nature would behave under previously unobserved, often previously non-existent, circumstances. Their typical products were the vast natural or experimental histories in which were amassed the miscellaneous data that many of them thought prerequisite to the construction of scientific theory...That attitude towards the role and status of experiment is only the first of the novelties which distinguish the new experimental movement from the old. A second is the major emphasis given to experiments which Bacon himself described as "twisting the lion's tail." These were the experiments which constrained nature, exhibiting it under conditions which it could never have attained without the forceful intervention of man. The men who placed grain, fish, mice, and various chemicals seriatim in the artificial vacuum of a barometer or an air pump exhibit just this aspect of the new tradition.” (pp.11-13)

²⁰¹ “Thus every one thing exists for the sake of all things and all for the sake of one; for the one is of course the all as well. Nature, despite her seeming diversity, is always a unity, a whole, and thus, when she manifests herself in any part of that whole, the rest must serve as a basis for that particular manifestation, and the latter must have a relationship to the rest of the system” (*Setting Forth Morphology*, GOS p.60).

²⁰² (KU 5:377-381).

scientific inquiry *in general* and not merely the discovery and systematization of *mechanical* laws.

Goethe contrasts his own approach, which he calls “delicate empiricism”, with the Baconian idea of “torturing” or “interrogating nature” through strictly contained and controlled (and, in Newton’s case, mathematically contrived) experimental situations that aim to isolate specific quantifiable properties of the objects of study. Everything in nature, and in our experience of nature, he argues, is thoroughly interconnected and is in motion, so that every particular experience or fact has to be understood in the context of a number, ultimately a countless number, of others.²⁰³ Artificial experimentation that hopes to find the basic principles that govern nature by isolating certain measurable (formal) aspects of natural phenomena, considering them in fixed separation from other aspects and elements, will not result in genuinely objective knowledge. Contra Bacon, Goethe insists that “nature will reveal nothing under torture.”²⁰⁴

In one of the milder versions of his criticism of Newton’s *Optics*, Goethe blames Newton for making a mistake of “using a single phenomenon, and an over-refined one at that, as the foundation for a hypothesis supposed to explain the most varied and far-reaching events in Nature.”²⁰⁵ While we can certainly learn something from a single experiment, it cannot on its own *prove* a theory or settle disputed questions. Since natural

²⁰³ In the Preface to the *Theory of Colors*, Goethe talks of the “language” of nature in which it “converses with itself and with us through a thousand phenomena.” “No one who is observant,” he adds, “will ever find nature dead or silent”. Nature is in constant movement and “[w]e perceive these elements of movements and structure in a variety of ways: as simple attraction and repulsion, as the waxing and waning of light, as the motion of air, as vibration of solid bodies, as oxidation and reduction. All these, however, have the effect of **dividing and uniting**, of **setting existence in motion** and lending support to some form of life.” (GSS p.158, my emphasis)

²⁰⁴ Goethe, *Maxims and Reflections*, (GSS p.307); See also, “the phenomena must be freed once and for all from the grim torture chamber of empiricism, mechanism, and dogmatism; they must be brought before the jury of man’s common sense” (GSS p.309).

²⁰⁵ Goethe, *Setting Forth Morphology* (GOS p.55).

phenomena are dynamically interconnected, Goethe stresses, “as worthwhile as each individual experiment may be, it receives its real value only when united or combined with other experiments”.²⁰⁶

Newton’s reliance on a single crucial experiment, or even a handful of relatively isolated experiments, amounts, according to Goethe, to forcing nature, under artificial conditions conducive to mathematizing the phenomenon, to produce just the result Newton wants to see. In an apparent reference to Newton, he writes, for example:

“We often find that the more limited the data, the more artful a gifted thinker will become. As though to assert his sovereignty he chooses a few agreeable favorites from the limited number of facts and skillfully marshals the rest so they never contradict him directly. Finally he is able to confuse, entangle, or push aside the opposing facts and reduce the whole to something more like the court of a despot than a freely constituted republic.” (*The Experiment as Mediator between Subject and Object*, GSS, p.15)

Most importantly, for Goethe, Newton’s version of Baconian experimentalism represents the scientific attitude that treats phenomena as mere signs, as it were, of hidden causes that produce them. This attitude, he argues, is unwarranted, fruitless, and even contrary to experience. He rejects the claim that we can deduce these hidden causes from just a few well-chosen phenomena, ignoring or discarding the multitude of other phenomenal manifestations and inter-connections.

The kind of experimental philosophy Goethe opposes in his polemic against Newton generalizes on an overly narrow basis of a few quantifiable phenomenal properties and relations between them. It allows a theory or hypothesis to intervene prematurely in the process of scientific investigation, before affinities, connections and mutual influences among the full range of phenomena are thoroughly investigated and the adequate

²⁰⁶ Goethe, *Experiment as Mediator between Subject and Object* (GSS p.13-14).

“experimental history” is put together.²⁰⁷ In a way, Goethe sees Newton as not adhering to his own prohibition against feigning hypotheses.

It is fair to say, then, that in Goethe’s eyes, the Newtonian approach combines the worst aspect of Baconian experimental method – *imposing presupposed external criteria* on nature rather than seeking what is true or intrinsic in it – with what Bacon himself criticized as excesses of mathematizing science – *formalization* that over-generalizes across qualitatively different domains and tends to hide or disregard important differences and essential qualitative relations between the phenomena.

If the Newtonian method is unsatisfactory, in Goethe’s view, what does he offer in its place?

3. Goethe’s method and conception of science

3.1

Goethe’s development of an alternative non-Newtonian approach to scientific investigation was motivated by the aim of reconciling our need to comprehend nature through theories and systems (a need that “springs by necessity from the organization of our being”,²⁰⁸) and our responsibility to nature to know its truth (“to know nature’s objects

²⁰⁷ Goethe writes, for example, “Thus we can never be too careful in our efforts to avoid drawing hasty conclusions from experiments or using them directly as proof to bear out some theory. For here, at this pass, this transition from empirical evidence to judgment, cognition to application, all the inner enemies of man lie in wait: imagination, which sweeps him away on its wings before he knows his feet have left the ground; impatience; haste; self-satisfaction; rigidity; formalistic thought; prejudice; ease; frivolity; fickleness – this whole throng and its retinue...I would venture to say that we cannot prove anything by one experiment or even several experiments together, that nothing is more dangerous than the desire to prove some thesis directly through experiments, that the greatest errors have arisen just where the dangers and shortcomings in this method have been overlooked.” (*Experiment as Mediator between Subject and Object*, GSS p.14)

²⁰⁸ Goethe, *Experiment as Mediator between Subject and Object* (GSS p.14).

in their own right and in relation to one another²⁰⁹). The new natural science, in his view, has not taken the latter demand seriously enough, approaching its objects in a way that, in fact, hinders its fulfillment. To know things in nature in their own right, a true scientist must follow the method that is “in harmony with nature”²¹⁰. Goethe’s criticism of Newton already points to two general desiderata such a method must fulfill:

- (i) It cannot impose external standards and structures on its objects; instead, it must aim to avoid *subjectivity* and seek the standards and organization *intrinsic* to natural things themselves. This implies that *objective* knowledge of nature requires primary focus on the *comprehensive study of the phenomena* – of all the ways things naturally present themselves in experience.
- (ii) It must help the researcher to comprehend activity, development, self-organization, and unity in nature, to gain genuine understanding of natural things in their interconnection and mutual influence.

Throughout his scientific writings, Goethe tries to show that we can come to know natural things and living beings *as they truly are* only through meticulous observation of development and of the natural organization of phenomena that minimizes imposition of theoretical constructs and scientific prejudices of the studying subject. Genuine understanding of nature (vegetative life, embryonic development, sunlight, atmospheric and climatic dynamics, etc.) requires that we “look on” and “listen on” as objects of our study present themselves in their own natural setting, under natural conditions and in relation to other natural things, holding back the ever-present impulse to theorize until we

²⁰⁹ Goethe, *Experiment as Mediator between Subject and Object* (GSS p.11, my emphasis).

²¹⁰ Goethe, “Intuitive Judgment”. In *Goethe’s Botanical Writings*, p. 233.

acquire a detailed and comprehensive view of the phenomena. “[O]ur full attention,” says Goethe, “must be focused on **the task of listening to nature to overhear the secret of her process**, so that we neither frighten her off **with coercive imperatives**, nor allow her whims to divert us from our goal.”²¹¹ A true scientist must look for “the measure for what he learns, the data for judgment, not in himself but in the sphere of what he observes”.²¹² Instead of interrogating or torturing nature, dissecting it through analysis and abstraction, his first duty is to *see* and *understand* natural phenomena as they actually occur *in nature*.

In light of his view of the intrinsic interconnectedness and unity of nature, Goethe emphasizes the need to study objects in *all* their phenomenal manifestations, paying particular attention to transitions and connections within the complete series of these manifestations. In the methodological essay *The Experiment as Mediator between Object and Subject (Der Versuch als Vermittler von Object und Subject)*, he writes:

“Nothing happens in living nature that does not bear some relation to the whole...All things in nature, especially the commoner forces and elements, work incessantly upon one another, we can say that each phenomenon is connected with countless others just as we can say that a point of light floating in space sends its rays in all directions. Thus when we have done an experiment of this type, found this or that piece of empirical evidence, we can never be careful enough in studying **what lies next** to it or **derives directly from it**...**To follow every single experiment through its variations is the real task of the scientific researcher.**“ (GSS, pp.15-16, my emphasis)

Each subsequent experiment is a variation or gradual modification of the experiment that precedes it. Each experiment “derives” from previous experiments in the series, in a sense that it is partly suggested by the empirical evidence observed in the

²¹¹ Goethe, *Problems* (GSS, p.44, my emphasis).

²¹² Goethe, *Experiment as Mediator between Subject and Object* (GSS, p.11).

previous experiments, continuing on until *all* meaningful variations are reasonably thought to be exhausted. In *The Twenty-Five Years of Philosophy*, Eckart Förster offers the following helpful summary of the way Goethean experiments proceed:

“[T]he last experiment must again be followed by a contrary experiment, and...the common feature which is thus revealed to the viewer must in turn be diversified in further experiments. In this way, a chain of experiments is produced in which no gaps remain, and in which one experiment gives way to its polar opposite until all the appearances that make up the phenomenon have been exhausted and reveal themselves as a totality.” (*The Twenty-Five Years of Philosophy*, p.171)

Goethe thinks of this sequence of individual experiments, as a whole, as a single experiment that presents one experience from the widest possible manifold of perspectives and constituting what he calls an empirical evidence or experience “of a higher kind” (*Erfahrung höhere Art*).²¹³ Reflecting on this experience allows the researcher to grasp the inner principle, the *idea of a whole*, that unifies, governs, and makes itself explicit in, the phenomena in all their variations and transformations, revealing the interconnectedness and unity in the diverse phenomenal manifestations.

On Goethe’s view, only this kind of experimental approach can make an object of natural science fully intelligible by disclosing necessary interrelations within the manifold of its phenomenal properties. This necessity does not belong merely to the way we conceive of phenomena – not, for example, as Kant thinks of the category of necessity, as a relation of the concept of an object to the faculty of cognition rather than a further determination in the object itself.²¹⁴ Rather, a Goethean ‘true’ scientist seeks to understand the necessity *intrinsic* to the objects themselves and, Goethe argues, he *can*

²¹³ Goethe, *The Experiment as Mediator between Subject and Object* (GSS, p.16).

²¹⁴ (KrV A219/B266).

achieve this understanding. He can obtain genuinely objective knowledge of the natural world (based on the “intuitive understanding” of active principles in nature) by meticulously progressing through, and reflecting on, a complete experimental series that is guided, in a way, by the rhythm of nature’s own activity. He can often construct this series by following natural processes of separation and combination that everywhere in nature are inextricably linked together and exist side by side.^{215 216}

A scientist’s first duty is to aim at *the completeness of the phenomena*, seeking their natural series in which they present themselves to the observer “as an organization manifesting **an inner life of its own**”²¹⁷ rather than being arranged “in some hypothetical way [or] made to serve the dictates of some system.”²¹⁸ This “**delicate empiricism**,” says Goethe, “**makes itself utterly identical with the object**, thereby becoming **true theory**.”²¹⁹ The underlying thought here is that the proper method must allow the essential character, the intrinsic nature, of the object of study to become explicit for the researcher in the natural organization of the *complete series* of its phenomenal manifestations. And only by grasping the essential character of this series *as a whole*, can the scientist obtain genuinely objective knowledge of natural things and living beings.

²¹⁵ “[S]eparating what is united and uniting what is separate is the life of Nature. This is the eternal systole and diastole, the eternal synkrisis and diakrisis, the breathing in and out of the world.” (“Setting Forth Morphology”; GOS p.53)

²¹⁶ Indeed, Goethe tells us that it is consideration of activity in nature, and of life in particular, that forces a scientist to consider “**all natural phenomena** in a certain developmental sequence and attentively to follow the *transitions* forwards and backwards. For only in this way [does he] finally arrive at **the living view of the whole** from which a concept is formed that soon will merge with the idea long an ascending line.”(*Cloud Formation according to Howard (Wolkengestalt nach Howard)*; LA I 8:74, quoted in Eckart Förster, “The Twenty-Five Years of Philosophy” p.276).

²¹⁷ Goethe, *Delicate Empiricism*,(GOS p.83, my emphasis).

²¹⁸ Goethe, *Delicate Empiricism* (GOS pp.83-84).

²¹⁹ Goethe, *Maxims and Reflections* (GSS p.307, my emphasis).

To be clear, in demanding that scientists refrain from premature theorizing and focus first on simply listening to nature, Goethe does not imply that scientific observation can be conducted without any presuppositions at all. Indeed, he points out that all scientific observation and reflection is the work of human beings who unavoidably look at the world from a certain theoretical (or folk-theoretical) standpoint. His claim is that, as scientific investigators, we must approach things in nature with awareness of this fact and with openness to the possibility that *any* aspect of this standpoint may have to be revised in light of the experimental progression. In addition to not feigning hypotheses²²⁰, we should give up the idea that the method, according to which the investigation is to be conducted, *can be planned out in advance*. In a way, the very method of inquiry is shaped by the progress of a scientist's experience of the object, and, therefore, at least in part, by the object itself. The method of investigation is not imposed on the object. Rather, it is a path that naturally emerges through the interaction or mediation between phenomena and a researcher's powers of reflection and comprehension.

The method of investigation is, in this way, inseparable from its object. Goethe himself refers to it as “**objective thinking**,” the term coined by Johann Heinroth, a well-known professor of medicine at the University of Leipzig, as a favorable description of Goethe's “unique” approach. In his *Manual of Anthropology* (1822), Heinroth praises Goethe's thinking for working “objectively”, by which, as Goethe explains, “he means that my **thinking is not separate from the objects**: that the elements of the object, the perceptions of the object, flow into my thinking and are fully permeated by it; that **my**

²²⁰ Regarding hypotheses, Goethe writes, “Hypotheses are scaffolding that one erects in advance of the building and that one takes down when the building is finished. The worker cannot do without them. But he must be careful not to mistake the scaffolding for the building.” (*Delicate Empiricism*, in GOS p.85)

perception itself is a thinking, and my thinking perception.²²¹ *Objective thinking* alone, in Goethe's view, allows the researcher to gain "intuitive understanding" (or "intuitive perception") of the essential nature of the object of study, its *Idea*, or what he calls *Urphänomen* – an archetypal or original phenomenon (an archetypal plant, a vertebrate structure, or an archetypal phenomenon of light, for example).

This intuitive understanding, however, is not knowledge of things in themselves, in Kant's sense. To Goethe, as we have seen when we considered his criticism of Newton, the *phenomena* – nature as it presents itself to the researcher – are of primary interest. He considers Newton's optics to be a vivid illustration of the fact that attempts to find (through theoretical analysis and with the help of geometry) hidden causes and powers behind the phenomena lead us away from genuine understanding of nature. Thus, "any attempt to express the *inner* nature of a thing is fruitless. What we perceive are effects, and a *complete* record of these effects ought to encompass this inner nature."²²² There is nothing essentially hidden behind the phenomena.²²³ Simply put, there is no hidden causal explanation of the kind presupposed by mechanistic science; if one has a complete phenomenological Goethean story, no further explanation is needed.

3.2

Goethe's conception of *Urphänomene* is motivated by his aim to understand unity and development in nature, his interest in nature's *active principles* rather than in

²²¹ Goethe, *Significant Help Given by an Ingenious Turn of Phrase* (GSS p.39, my emphasis).

²²² Goethe, *The Human Being is the Most Exact Instrument* (GOS p.33).

²²³ Nature, he insists, "has neither core, nor outer rind, being all things at once" (GSS, p.38) and, as attested by his own experimental studies, we can know Nature as a truth without veil. (see "Genius Unveils the Bust of Nature" in *Goethes Werke*, 1, 4, p. 127).

abstracting generalizations and taxonomies.²²⁴ The *Urphänomen* is not a discursive concept – it is not a universal representation that abstracts out the marks that various ordinary phenomena have in common. Rather, it is what Kant calls a “synthetic” (and Hegel calls “concrete”) universal. Goethe conceives it as the concept of a *unity (or active unifying principle)* immanent in the manifold of phenomena. It is a principle that governs the inner dynamics of things in nature (self-maintenance, development, interaction, growth, etc.) and makes possible the variability of forms (of plants and animals, for example). Förster describes Goethe’s thinking about the notion of *the archetypal phenomenon* this way:

“Just as I cannot assemble a living plant from detached leaves, stems, and flowers, I cannot, according to Goethe, progress toward a comprehension of a developing plant out of abstracted universal concepts of leaf, stem, and flower.... I must find a possibility to make the concept so moveable and changeable that it can take place together with the development of its object.” (*The Significance of §§76 and 77 of the Critique of Judgment for the Development of Post-Kantian Philosophy*, Part I, 2009, p.12)

In other words, Goethe thinks of *Urphänomen* as an embodied *concept* or *form* that has productive or formative power in nature, as a kind of Aristotelian idea that manifests itself fully in a complete series of phenomena. What we attain when we comprehend the *Urphänomen* is the idea that makes possible “**the living view of the whole**”.

For example, in his early *Metamorphosis of Plants* (1790), Goethe claims to have captured this kind of living view of plant life – an archetypal plant (*Urpflanze*) – by following “the method in harmony with nature”.²²⁵ He proceeds through a series of meticulous and exhaustive observations of the natural successive modifications of parts

²²⁴ For a helpful discussion see Dennis L. Sepper, *Goethe contra Newton*, pp.43-45.

²²⁵ Goethe, “Intuitive Judgment”. In *Goethe’s Botanical Writings*, p. 233.

and contiguous stages of life-cycles of plants, reflecting on the transitions between these stages and modifications, and on their interrelatedness. This, he argues, allows him to attain a kind of intuitive understanding of the *morphological type*, or *the archetypal phenomenon*, of plant life (*Urpflanze*).

As a synthetic, or concrete, universal, *Urpflanze* cannot be grasped simply by abstracting out and grouping together certain attributes that all plants possess in common. It is a *form* (or *Idea*) that is *active* in all parts of a plant and throughout all its transformations and reproduction, constituting the plant's living nature *as a plant*.²²⁶ Importantly, it is not a mere idealization, but a *phenomenon*, even if a very special one.²²⁷ Goethe describes it concretely as a dynamic morphological pattern of transformation and reproduction that animates, and is *observable* in, every living specimen of vegetative life.

According to Goethe, a true botanist attains the intuitive understanding of an archetypal phenomenon of a plant by following a complete natural series of ordinary phenomena of plant life and grasping the inner necessity of this series as a whole, as it were.²²⁸ He can then “descend” from the archetypal phenomenon (the whole) to

²²⁶ Goethe writes “In the progressive modification of that parts of the plant, one single force is at work... The force contracts, expands, develops, transforms, connects, separates.” (LA I, 10:58) Quoted in Eckart Förster, *The Twenty-Five Years of Philosophy*, p.273fn.

²²⁷ Henry Bartoft in the *Wholeness of Nature* quotes from the letter Goethe wrote in 1827 describing an archetypal or primal phenomenon as a kind of a concrete universal: “[A] primal phenomenon is not to be considered as a principle from which manifold of consequences result, rather it is to be understood as a fundamental appearance, [i.e., phenomenon] within which the manifold is to be seen.” It is worth noting that Hermann von Helmholtz, in his analysis of Goethe’s criticism of Newton’s theory of colors, remarks that there is a “secret affinity” of Goethe’s science with the natural philosophy of Schelling and Hegel, key to which is the belief that one can find “the direct expression of the idea” in the phenomenon itself. Early in his scientific studies, Goethe remarked that nothing brought out more sharply the separation between him and Schiller, who “as a follower of Kant, maintained that “the idea is the goal, ever to be sought, but ever unattainable, and therefore never to be exhibited as realized in phenomenon.” (Hermann von Helmholtz, “On Goethe’s Scientific Writings”, p.46).

²²⁸ See GOS, p.91. In the §77 of the *Critique of Judgment*, which, as Eckart Förster has convincingly shown, was of great importance for Post-Kantian German thinkers, Kant suggests that we can and must conceive of an understanding very different from ours, a non-discursive intuitive understanding that

particular ordinary phenomena, gaining deeper understanding of them as interconnected aspects or moments of the *Urpflanze*. Thus, Goethe argues that the life-cycle of a plant is best understood in terms of a series of alternating expanding and contracting movements through which various parts of the plant develop as manifestations of the metamorphosis of one and the same ideal organ – the “original” or “primal” leaf form. In the case of a flowering plant, he describes it as follows:

“We first noted an expansion from the seed to the fullest development of the stem leaf; then we saw the calyx appear through contraction, the flower leaves through expansion, and the reproductive parts through a contraction. We will soon observe the greatest expansion in the fruit, and the greatest concentration in the seed. In these six steps nature steadfastly does its eternal work of propagating vegetation by two genders.” (*The Metamorphosis of Plants*, §73; GSS, p.87)

The botanist can even “construct” in thought new kinds of plants by letting them, under different empirical conditions, “unfold” from the *idea of a whole* (the *Urpflanze*) in ways that accord with its inner necessity.²²⁹

Generally speaking, insofar as it specifies a certain morphological pattern, the *Urphänomen* can play a role similar to Kant’s regulative ideal in guiding scientific inquiry. It can guide empirical discovery of properties of certain plants or animals, for

proceeds from the intuition of the whole to its parts, but this knowledge is impossible for us. Goethe is deeply impressed by the idea of intuitive understanding, yet he disagrees with Kant's claim that this kind of understanding is beyond human capacities. He argues that our experience of organisms and our necessary conception of them as “living, determined, independent, and spontaneously effective” natural beings (*Lectures on a General Introduction to Comparative Anatomy*) reveals in us the capacity for the kind of intuitive understanding Kant describes, which Goethe interprets as an ability to grasp an archetypal phenomenon of a natural thing through an experiment of a higher kind that first discursively and systematically brings together the totality of the thing’s phenomenal properties. In Goethe’s hands intuitive understanding does not sound particularly mysterious or inaccessible. He writes, for example, “When we are able to survey an object in every detail, grasp it correctly, and reproduce it in our mind’s eye, we can say that we have an intuitive perception of it in the truest and highest sense.” (GOS, p.91)

²²⁹Thus, Goethe proclaims, “With this model and the key to it, an infinite variety of plants can be invented, which are consistent, that is, they are such that, even if they do not exist, they *could* exist...for they possess an inner truth and necessity.” (See *Wisdom and Experience*, quoted in Eckart Förster’s “The Twenty-Five Years of Philosophy” p.274).

example, that are not immediately manifest (e.g., a particular kind of a rudimentary bone in elephants or humans). But, to use Kant's terminology, its role is not merely regulative; it is also and at the same time constitutive, given that archetypal phenomena are conceived as constituting life and activity in nature.

3.3

Goethe's approach, as an alternative to the Newtonian method, comes into view particularly clearly when he steps into the traditional domain of physical science, namely, in the context of his study of light and his theory of color. In *The Experiment as Mediator Between Subject and Object*, the essay which tries to clarify his approach in the *Contributions to Optics*, Goethe emphasizes the holistic nature of the proper experimental method. Here again, he stresses the importance of carefully building up experimental evidence in order to comprehend the object of study from the widest variety of perspectives. This allows the scientific researcher to achieve experience of a "higher kind" that connects these perspectives into a "living view of the whole" and makes possible intuitive understanding of *Urphänomene*. Perhaps surprisingly, he even compares the role, and the researcher's intuitive grasp, of the *Urphänomen* to the role, and the mathematician's intuitive grasp, of a mathematical formula:

"Such a piece of empirical evidence, composed of many others, is clearly **of a higher kind**. It shows the general formula, so to speak, that overarches an array of individual arithmetic sums. In my view, **it is the task of the scientific researcher to work toward empirical evidence of this higher kind**....From the mathematician we must learn the **meticulous care required to connect things in unbroken succession**, or rather, **to derive things step by step**. Even where we do not venture to apply mathematics we must always work as though we had to satisfy the strictest of geometers.

In the mathematical method we find an approach which by its deliberate and pure nature instantly **exposes every leap** in an assertion. Actually, its **proofs** merely state in a detailed way that what is presented as connected was already there in each of the parts and as a consecutive whole, that it has been reviewed in

its entirety and found to be correct and irrefutable under all circumstances. Thus its **demonstrations** are always **more exposition, recapitulation, than argument.**” (GSS, p.16, my emphasis)

Although Goethe’s analogy is imperfect – unlike *archetypal phenomena*, mathematical formulas are abstract universals – it is meant to highlight some important features of his method. In the first place, the analogy stresses that the intrinsic nature of an object of a scientific study can only be genuinely understood through reflection on the whole of a series of its phenomenal manifestations. The aim is to proceed in a manner that allows the object to present all of its aspects to a researcher in a natural way and under manifold natural conditions. To comprehend a natural thing in its truth, the *idea of a whole* (the *archetypal phenomenon*), a scientific researcher ought to work towards the experience of a higher kind. She can achieve this goal through careful observation and reflection on the contiguous sequence of varying phenomena, naturally progressing from experiment to experiment without imposition of a pre-conceived theory or hypothesis. In this progression, as in the geometrical analysis and proof, each next step is “derived” from the previous steps, “in unbroken succession”.

In the second place, Goethe’s analogy draws attention to a parallel between the process by which the researcher achieves the intuitive grasp of the *Urphänomen* and the constructive mathematical proof (synthetic demonstration) that ensures the lack of gaps in analysis and exhibits (makes intuitive) the universal in any and all particular phenomenal instances.

Goethe claims that he proceeds precisely in this way in his *Contributions to Optics* (and later in the *Theory of Colors*), presenting “**every known** phenomenon in a certain **sequence**, so that we can determine the degree to which all might be governed by a

general principle.”²³⁰ He starts with a look through a prism at everyday objects and noting how colors appear at their edges. Next, through the same prism, he looks at simple monochromatic backgrounds (white wall, blue sky, etc.) noting the absence of other colors. He then proceeds to observe how certain colors become visible as soon as other shapes (e.g., clouds) appear against the monochromatic backgrounds, following this up with a series of observations of colors that emerge when he looks at prismatic plates with different alternating black and white, and colored shapes and backgrounds (e.g., curved black lines against the white surface, then white stripes against the black surface, then

²³⁰ (GSS, p.16) Dennis Sepper, in his book *Goethe contra Newton*, provides an insightful description of the way Goethe applies this method in his optical research: "[E]ach isolated experience of looking at objects or displays through the prism gives a single "fact" to be reckoned with. But by means of constant comparison, contrast, simplification, and re-complication, Goethe is able to represent these many apparently isolated facts as different moments of a single dynamic phenomenon, moments that correspond to the varying conditions of the basic experiment. If one first observes a display card at a distance of two feet, then at four feet, one is not performing two different experiments but variants of one. All the variants of a single experiment can thus be comprehended in a kind of superexperiment that consists in changing distances, sizes of apertures and images, and other variables. In some cases the conditions can be varied continuously (e.g., the distance of the screen from the prism); in others this must be done in stages (e.g., the angle of refraction, by substituting different prisms made of the same kind of glass). The resulting superexperiment and superphenomenon represent a natural whole that has been discovered by prudent experimentation.... It is *Vermannigfaltigung*, manifolding by variation and augmentation, that constitutes the essential methodological principle of the *Beiträge zur Optik*. The series of prismatic experiments is intended to constitute a single ramified experience/experiment. It proceeds from an initial empirical experience to a systematic amplification, simplification, and finally recomplication of the relevant experiments — that is, experiments that surround the central phenomenon. Each step, each discovery suggests new possibilities that are in turn tested circumstantially. The method depends above all on utter familiarity with the phenomena and on the exhaustive enumeration of all contributing conditions and their variations. The experiments continue until a limit is reached, the point beyond which the phenomenon itself (in this case, color) disappears. If the phenomenon persists when a circumstance is omitted, or if varying the circumstances has no effect, then it is not essential to the appearance of the phenomenon. Once the elemental level has been reached, ...[then we can begin to] reconstruct the original event and the original experience of the phenomenon and to view it again with comprehension.

This comprehension is not, however, an end result that leaves all the individual cases behind for the sake of a formula, in the way that one can ignore all the individual addends once one has taken their sum. Comprehension does not take the form of a theory abstracted from the phenomena but rather the form of a seeing embedded in the fullness of phenomena. The proximate goal of Goethe's method is to achieve what he called a *naturgemäße Darstellung*, a presentation in accordance with nature, which implies that the presentation has to correspond to the fundamental elements of the phenomenon in question, such as the continuities, associations, contrasts, and wholes that give it structure. Goethe's physical science of color is thus morphological in much the same way that his other sciences are: It studies the manifold forms that the phenomenon (which is in itself a significant entity like color, a plant, an animal) assumes in its emergence, development, and disappearance. Goethe studied the phenomenon in its phenomenality. His method seeks to provide a simple and complete overview of the phenomenon by following the course of the experienced phenomenal event and its articulations." (pp.69-72)

black stripes against the white, and so on). What Goethe claims to have grasped through this extensive experimental sequence (what this sequence proves, as it were) is that light is a simple, fundamentally active, archetypal phenomenon that manifests itself in color in various ways under different conditions. Colors, he writes, “are the deeds of light, what it does and what it endures.”²³¹

Goethean experimental progression is both *analysis* of the manifold of phenomena (in following each experiment by another that modifies it, identifying possible contrary experiments, etc..) and *synthesis* of the experience of a higher kind (building up the complete continuous series of prismatic observations) that allows for an intuitive grasp of the *idea of a whole* (the archetypal phenomenon of light) immanent in this manifold. “[T]he sciences comes to life,” Goethe remarks in another methodological essay, *Analysis and Synthesis*, “only when the two [analysis and synthesis] exist side by side like exhaling and inhaling“.²³²

In sum, Goethe’s scientific work and his methodological reflections point to at least two key general features that are distinctive of his “*objective thinking*” as an alternative to received scientific methodologies of his time. First, it rejects *external imposition* of a pre-conceived *conceptual scheme* onto its object and requires that inquiry be guided by the nature of the object as it manifests itself to the researcher through a series of contiguous experiments. The method by which it proceeds is inseparable from the content and the form of its subject matter. There is a crucial difference between Newton’s

²³¹ See Preface to the *Theory of Colors* (GSS, p.158).

²³² Goethe, *Analysis and Synthesis*, (GOS p.55) Goethe adds: “Perhaps it is better to say that, whether we wish or not, it is unavoidable for us to proceed from the whole to the parts and from the parts to the whole, And the more vitally these two functions of the mind are conjoined, like breathing in and out, the better it will be for science and its friends.” (GOS p.57)

conception of scientific theory (as, roughly, a mathematically articulated system of propositions based on general principles "deduced" from experience with the help of geometry) and that of Goethe. Dennis Sepper describes it this way:

“Theory for Goethe is not a set of propositions or a mathematical modeling; rather it is more akin to something suggested in the root meaning of ancient Greek *theoria*, which was the activity of the spectator, a seeing and recognizing, a sense also conveyed by the German *Anschauung* ("onlooking," a perhaps simpler and more faithful rendering than the usual "intuition"). *Anschauung*, the direct and thoughtful viewing and experience of the phenomena, is the foundation of Goethe's science...“ (*Goethe contra Newton*, p.17)²³³

Generally speaking, what Goethe promotes can be characterized as qualitative or phenomenological rather than quantitative or mathematical natural science. His model of science is not grounded on formal mathematized principles, and largely for this reason, in his view at least, much better suited for understanding living beings in particular, but also certain non-organic phenomena and nature as a whole as an organized and self-organizing system.

Secondly, Goethe's scientific investigator does not seek an *a priori principle* or *formula* that abstracts from specifics of individual cases and particular manifestations of the object of inquiry. She is not searching for fundamental causes hidden behind the phenomena. Rather, her aim is understanding of the inner necessity and rationality expressed and embodied in a complete sequence of phenomenal manifestations of the object of study. That is, she aims to comprehend the essential nature of her subject matter

²³³ Consider also Rudolf Carnap's assessment of the merits of Goethe's approach in comparison to that of Newton's : "Today, of course, we know that, in the controversy between Newton's analytical, experimental, quantitative method, and Goethe's direct, qualitative, phenomenological approach, the former has not only won out in physics, but today is gaining more and more ground in other fields of science as well, including social sciences.... On the other hand, we should not overlook the great value that an intuitive approach like Goethe's may have for the discovery of new facts and the development of new theories, especially in relatively new fields of knowledge." (*An Introduction to the Philosophy of Science*, Dover Publications, 1966, p.111)

in all its phenomenal fullness, and *in all its interactions* with other things and active principles in nature.

3.4

Goethe's scientific views exerted profound influence on post-Kantian German philosophy. Hegel, in particular, often acknowledged a deep affinity between Goethe's approach to science and his own philosophy. We find a forceful expression of this kinship of thought in his letter to Goethe (of April 25th, 1825):

“[W]hen I look back over the course of my spiritual development I see you interwoven everywhere, and I could call myself one of your sons; from the nourishment you have given me, my inner self has obtained strength to resist abstraction, and has ordered its course aright by your system as by a beacon.”²³⁴

In another 1821 letter to Goethe, Hegel praises Goethe's scientific method as “a matter of spiritual intelligence for nature,” and declares it generally to be “the truly scientific knowledge in this field.” Indeed, he makes clear his complete agreement with Goethe's criticism of Newtonianism, contrasting Goethe's emphasis on “objective thinking” *with* the concrete phenomena with what he sees as Newtonians' preoccupation with formal frameworks imposed on objects externally:

“Newton and the entire community of physicists following him, on the other hand, lay hold of no matter what composite phenomenon, **rush to fix themselves in it**, and end up **putting the cart before the horse**, as the saying goes. It has happened in this connection that **they have made out circumstances immaterial to the natural state of the matter to be its conditions**, even when such circumstances were merely the result of the mishap of putting the cart before the horse. And then they force, botch, and falsify everything before and after wily-nilly into the mould. Yet they are not lacking for something *Ur* here. They **bring on a metaphysical abstract entity**. As created spirits they **place an inner worthy of themselves into the phenomena** – a content they have created for them.”²³⁵

²³⁴ *Briefe von und on Hegel*, Hegel to Goethe, April 25th, 1825.

²³⁵ *Briefe von und on Hegel*, Hegel to Goethe, February 24th, 1821, my emphasis.

According to Hegel, this turns things completely upside down, particularly if the intent of the Newtonian experimental science is to allow Nature itself definitively to answer questions as opposed to answers being dictated by its examiners.²³⁶

In book II of the *Encyclopedia of Philosophical Sciences*, the *Philosophy of Nature*, Hegel offers his own philosophical treatment of color, aligning himself with Goethe in sharp opposition to Newton. Indeed, he uses this contrast to stress the affinity of proper philosophical method with the Goethean style of scientific investigation, as opposed to the “crude” and “ossifying” Newtonian approach:

“There are *two* prevailing ideas about colors; the one with which we concur recognizes the simplicity of light, the other maintains that light is composite, which is the crudest of metaphysical propositions, and stands in direct contradiction to every Notion. It is pernicious, because **it is symptomatic of the whole way in which things are treated**. When dealing with light we put aside the contemplation of separateness and plurality, and have to raise ourselves to the abstract of existent identity. With light, therefore, **we are forced to rise to the ideal, to *Thought***; but such thought is rendered impossible in the other idea by the sheer crudity of the [Newtonian] conception. The **object of philosophy is never the [merely] composite, but the Notion**, the unity of differentiated terms, the **unity being immanent in them**, not external and superficial.” (EN §320Z, II, p.201, my emphasis)

In the next chapter, I will consider what Hegel takes to be the object of philosophy in some detail, and will argue that his conception of philosophical science and its method shares key features with Goethe’s “objective thinking.” Moreover, I hope to show that Hegel’s criticism of Kant, and in a way of Hegel’s modern predecessors in general, is motivated to a large extent by the same set of concerns that motivated Goethe’s attack on Newtonianism in natural science. In chapter 5, this will help to connect Hegel’s critique of Kant’s practical philosophy in particular to their fundamental disagreement about the proper method and form of science. Ultimately, I will argue that while Hegel’s own

²³⁶ See also Hegel’s discussion of analytic and synthetic methods in the *Encyclopedia Logic*, (EL §227).

“objective thinking” in practical philosophy contains valuable insights, there are good reasons to think that it is not, on the whole, a viable alternative to Kant’s approach in moral theory.

Chapter 4

Hegel's Goethean method and form of philosophical science

The last chapter began with a suggestion that Hegel's polemic against Kant's moral philosophy is fundamentally a disagreement about the nature of scientific method and of philosophy as science. While Kant's conception of method and of philosophy as science has key characteristics of the Newtonian approach (as I argued in chapters 1 and 2), Hegel's alternative view is in important ways influenced by Goethean methodological ideas. Chapter 3 discussed Goethe's objections to the Newtonian method and his positive view on the proper scientific method. The next step, and the intent of this chapter, is to connect Goethe's methodological views to Hegel's conception of philosophical science and its method. This will show that Hegel's conception of philosophical science in general has key features of Goethean "objective thinking" and can be plausibly characterized as "broadly Goethean". The next chapter will examine what this means for Hegel's practical philosophy, in particular.

Before I begin, I would like to clarify what kind of connection I see between Hegel's and Goethe's methodology. I do not want to claim (implausibly) that in his methodological thinking Hegel is indebted solely to Goethe. Indeed, in addition to his early and detailed studies of Kant, Hegel was immersed in an intellectual atmosphere in which many prominent thinkers sought to respond to, develop, and improve upon Kant's critical philosophy. Hegel's first philosophical publication was dedicated to the

difference between Fichte's and Schelling's philosophies,²³⁷ and the influence of (at least) these two philosophers on Hegel's conception of the aim and method of philosophical science, especially in the *Phenomenology of Spirit*, is undeniable. But, it is worth noting that both Fichte and Schelling were themselves fruitfully intellectually engaged with Goethe. As a result, their philosophies show a degree of Goethean influence, just as Goethe's views evolved, in part, as a result of his philosophical studies and exchanges with his philosophical interlocutors. Moreover, some important recent work, by Eckart Förster and Brady Bowman, in particular, has thrown into relief not only the impact of Goethean science on Hegel's philosophical methodology, but a *unique* structural analogy between Hegelian dialectic and Goethe's morphological method of "intuitive understanding".^{238, 239}

²³⁷ See Hegel's *The Difference Between Fichte's and Schelling's System of Philosophy*, published in September, 1801. In addition to Hegel's fundamental engagement with Kant, one may also point to influences of Spinoza, Herder, Jacobi, and others on Hegel, analysis of which may provide important and interesting insight into various aspects of his philosophy without detracting from the fact that Goethe's methodological ideas were of fundamental importance in Hegel's philosophical development.

²³⁸ See Eckart Förster's work on the subject, especially his book *The Twenty-Five Years of Philosophy*, and Brady Bowman's paper "Goethean Morphology, Hegelian Science: Affinities and Transformations" in *Goethe Yearbook XVIII* (2011). For some earlier work on the subject see, for example, Walter Kaufman's "Goethe, Kant, and Hegel. Discovering the Mind", Volume 1, 1990.

²³⁹ Bowman shows, for example, that the non-linear way in which Hegel's discussion develops in the *Phenomenology* stands in contrast to linear derivations of Fichte's "pragmatic history of the human mind" and Schelling's "history of self-consciousness" (Brady Bowman, "Ist Hegels frühe Logik eine 'Geschichte des Selbstbewußts-eins?'" in *Die Geschichtlichkeit der Vernunft*, ed. Ralf Beuthan (Heidelberg: Universitätsverlag Winter, 2006) 81–92). On the one hand, Bowman suggests that "[t]his organic complexity of the *Phenomenology* is without precedent in the work of Fichte and Schelling, not to mention earlier thinkers who were far from venturing upon the method of genetic exposition which forms perhaps the most valuable legacy of German Idealism." (Brady Bowman, "Goethean Morphology, Hegelian Science: Affinities and Transformations", p.170) He argues that this is especially evident in the transition from Consciousness to Self-Consciousness chapters in the *Phenomenology*. He concludes that "some of the most striking features of Hegel's mode of presentation [in this transition] are clearly indebted to Goethe's scientific methods. Not only the general unity of genesis and structure, so central to Hegel's thought, but also more specific features of retrograde metamorphosis, structural reduplication, distribution and fusion seem to have been adapted directly from Goethe's morphological approach." (p.175) On the other hand, Bowman argues that the non-linear development and organic complexity of the *Phenomenology* points to a striking methodological affinity with Goethean morphology.

The final preliminary point I want to make is this. In describing Hegel's method as "broadly Goethean", I do not mean to imply that it is simply Goethe's method. It is a form of philosophical investigation specific to what Hegel takes to be the object of philosophy, distinct from the object of Goethean natural science. Nevertheless, as I hope to show in the course of this chapter, this method is centrally motivated by considerations closely parallel to those that motivate Goethe's scientific attitude and, for that reason, structurally analogous to the Goethean approach. It is, as it were, Hegel's adaptation of the Goethean method to the subject matter of philosophical science.

The first task, then, is to see what Hegel's conception of the proper object of philosophy is and to consider his view on what constitutes a fully critical self-investigation of reason, how it ought to proceed if it is to result in genuinely objective philosophical knowledge and to establish philosophy as science.

1. Hegel on the object of philosophy and the need for a proper philosophical method

1.1

Hegel ends the third and final book of *Encyclopedia of Philosophical Sciences* – the *Philosophy of Mind* – with a passage from Aristotle's *Metaphysics*:

“And thought thinks itself because it shares the nature of the object of thought; for it becomes an object of thought in coming into contact with and thinking its objects, so that thought and object of thought are the same. For that which is *capable* of receiving the object of thought, i.e. the substance, is thought. And it is ***active when it possesses this object***. Therefore the latter rather than the former is the divine element which thought seems to contain...And life also belongs to God; **for the actuality of thought is life**, and God is that actuality...” (Met, XII.7 1072b17)²⁴⁰

²⁴⁰ Aristotle, *Metaphysics*, XII, 7 (1072b17), translated by W.D.Ross, in Barnes ed., *The Complete Works of Aristotle*, Revised Oxford Translation, Princeton University Press, 1984.

Although Hegel scholarship lacks consensus on many interpretative issues, Hegel's indebtedness to Aristotle has always been widely acknowledged. Arguably, Hegel saw himself as an Aristotelian who gave the proper scientific foundation and completion to Aristotle's philosophical insights.²⁴¹ In his view, this achievement was made possible by the new philosophical method and a corresponding conception of philosophy as science. This method and conception of science shares some key features with Goethe's scientific methodology, or so I will argue. Let me begin by briefly sketching what Hegel finds particularly important in Aristotle's philosophy, and what he thinks must be improved and how.

High praise for Aristotle's thought and its affinity with idealism is a recurrent theme in many of Hegel's mature writings. In the *Lectures on the History of Philosophy*, he describes Aristotle as "acquainted with the deepest kind of speculation – idealism".²⁴² This assessment is based, in the first place, on Hegel's appreciation of so-called Aristotelian "conceptual realism"²⁴³ – a view that reality has an inherent rational or conceptual order, and that the essence of this rational order is activity. Aristotle identifies forms of substances with *activity immanent in things*, constitutive of their being what they are. They are universals productive of and embodied in the world.

Indeed, Hegel himself thinks of forms of thought – *Concepts* – on the model of Aristotelian *entelechy* – free activity that has its end in itself and is the realization of this

²⁴¹ In a famous 1810 review of *Phenomenology*, Hegel's student at Jena, K.F. Bachmann, describes Hegel as modern philosophy's "German Aristotle." This comparison remains practically common place in German philosophical circles for decades after. (See, for example, Rozenkranz, *Hegel Leben*, 1844, p.201) Also see Nicolai Hartmann, *Aristoteles*, 1923, p.215.

²⁴² Hegel, *Lectures on the History of Philosophy*, (LHP, vol. 2, p.119)

²⁴³ This is a relatively recent term, not used by Hegel himself. See, for example, Robert Stern, *Hegel and the Phenomenology of Spirit*, p.101.

end.²⁴⁴ These forms of thought are not abstract universals that relate to objects externally, but universals that are self-actualizing *in the world*, making their own *truth*, so to speak. Here, we have to keep in mind that *truth*, on Hegel's view, does not mean correctness, or formal correspondence between cognition and its object. Rather, it is adequacy of an object to its concept, how well it fulfills its own nature. Something is true, says Hegel, when it is what it ought to be. It is in this sense that we speak of a 'true friend', 'true State', or a 'true work of art'.²⁴⁵ Concepts that are fully actualized, whose potentialities are fully developed, Hegel calls Ideas.²⁴⁶ In the *Encyclopedia Logic*, he describes Ideas as "actuality". He explains what he means by this term by comparing it to Aristotle's notion of activity or *energeia* – as realization of intelligible in the sensible, and as unity of

²⁴⁴ In the *Encyclopedia Logic*, Hegel describes the Concept (of thought thinking itself) as "the principle of all life" and its progression as a development of itself (EL §161). He adds that "What corresponds to the level of Concept in nature is organic life. For example, a plant develops from its germ: the germ already contains the whole plant within itself, but in an ideal way, so that we must not envisage its development as if the various parts of the plant – root, stem, leaves, etc. – were already preset in the germ *realiter*, though only in a very minute form. This is the so-called Chinese box hypothesis, the defect of which is that what is present initially only in an ideal way is regarded as already existent. What is correct in this hypothesis, however, is just that the Concept remains at home with itself in the course of its process, and that the process does not posit anything new as regards content, but only brings forth an alteration of form. The "nature" of the Concept ... shows itself in its process to be a development of itself." (EL §161A)

²⁴⁵ See, for example, the *Philosophy of Nature*: "Truth in its **subjective meaning** is the agreement of thought with the object; in its **objective meaning**, truth is the agreement of the object with its own self, the correspondence of its reality with its concept" (PhN §246, p.10, my emphasis). But, indeed, no finite thing can be *strictly* true, on his view, because, its finitude implies that its truth is always bound up, to some extent, with things and relations outside its own concept. See e.g. (EL §§24A2, 172A).

²⁴⁶ For Hegel, Concepts, even when not yet fully realized, are not something merely potential; they have actuality that seems to correspond to Aristotle's first actuality (e.g. actuality as life and development of a sapling growing into an oak). The actuality of the concept in which all potentialities are fully developed, the actuality of *the Idea*, seems to correspond to Aristotle's second actuality (for example, actuality as the life activity of a fully developed oak tree as the living being that it is). The second actuality is an activity that constitutes and expresses what it is *to be* a thing qua the thing that it is – its activity of persisting as the thing that it is, of maintaining or sustaining its developed capacities/potentialities over time. It is, as Aristotle puts it, "the maintenance of what is potential by the agency of what is actual and already like what is acted upon, as actual to potential" (*De Anima* 417b2).

thinking and the object of thought²⁴⁷ – and contrasts this (properly philosophical) meaning of “actuality” to the common modern day meaning of this term as external sensible existence.

The *Idea*, says Hegel, is the *truth* of its Concept – a Concept’s adequate realization in the world. Not surprisingly, he often describes Ideas by appealing to Aristotelian hylomorphic notions. Here is how the *Philosophy of Right* introduces the *Idea* of right, for example:

“The subject-matter of *the philosophical science of right* is the *Idea of right* – the concept of right and its actualization...The concept and its existence are two sides, distinct yet united, like soul and body. The body is the same life as the soul, and yet the two can be named independently. A soul without a body would not be a living thing, and *vice versa*. ...The unity of visible existence and concept, of body and soul, is *the Idea*. It is not a mere harmony of the two, but their complete interpenetration. **There lives nothing, which is not in some way idea. The idea of right is freedom**, which, if it is to be apprehended truly, must be known both in its concept and in the embodiment of that concept.” (PhR §1; §1AH)²⁴⁸

It is precisely because Hegel, like Aristotle, conceives Concepts and Ideas as reason actual and immanent *in* the particulars, *in* the world as it is in itself (of both nature and spirit), that he distinguishes these “concrete universals” from what he calls “mere” concepts of the “abstracting” understanding, or “analytic universals” – universal representations of a reflecting subject that mark what several objects have in common.

²⁴⁷ In the *Lectures on the History of Philosophy*, Hegel writes for example, “The chief moment in Aristotelian philosophy is the affirmation that thinking and what is thought are one, that what is objective and thinking (*energeia*) are one and the same.” (LHP vol 2, p. 148)

²⁴⁸ In the *Encyclopedia Logic*, Hegel describes the relation between the Idea and the Concept as follows: “The Idea is what is true in and for itself, the absolute unity of Concept and objectivity. Its *ideal* content is nothing but the Concept in its determinations; its *real* content is only the *presentation* [exhibition] that the Concept gives itself in the form of external *being there*, and since this shape is included in the ideality of the Concept, or in its power, the Concept preserves itself in it. ... The Idea is the Truth; for truth means that objectivity corresponds with the Concept ...” (EL §213, 213A), “The Idea is the adequate Concept” (SL §1631). Also see (EL §6). Although, in these passages, Hegel speaks of *the Idea* and *the Concept* – an all encompassing systematic whole of Ideas and Concepts, the whole of reason, or the ultimate reality, depending on the reading – the relationship he describes also holds between particular Ideas and Concepts.

Secondly, Hegel praises Aristotle for having, in his conception of active intellect, “the same fundamental theory” as his own theory of the unity of subjectivity and objectivity. He sees Aristotle’s deepest insight in the conception of reason as essentially *energeia* – activity or actuality. On this view, the self-conscious activity of thought constitutes a genuine unity of subjective (thought as a thinking mind’s conception of the object of thought) and objective (thought as the rational form of the object itself that makes it thinkable by the mind). In knowing its object the mind and the object of thought share, or actualize, the same rational form. An active mind is *thought that thinks itself*. Since the activity of reason is itself thinkable in the same way objects in general are,²⁴⁹ thought is *in its essence a self-producing and free activity*. For Hegel’s Aristotle, this essentially *unrestricted, active and productive* aspect of the mind is the form of all thought in general, whether human or divine.^{250 251}

1.2

²⁴⁹ See (*De Anima*, III.5 410a3-5).

²⁵⁰ In *De Anima* III.5, Aristotle describes active or *poiêtic* intellect as an aspect of reason we share with God.

²⁵¹ In his extensive study of the relationship between Hegel’s idealism and Aristotle’s philosophy, Alfredo Ferrarin notes a number of ways in which Hegel aligns himself with Aristotle’s thought (or at least Hegel’s interpretation of Aristotle’s thought) in drawing a contrast between his own philosophical science and Schelling’s system of identity. Ferrarin points out, for example, that “In the *Lectures on the Metaphysics* Hegel curiously argues polemically against Schelling by showing the superiority of the *energeia* of the Aristotelian God (the unity with itself that realizes itself in its self-objectification) over the abstract system of identity (*VGPh* 163–4). The true philosophy is not a dry and dead identity lacking development but God’s “energy.” (*Hegel and Aristotle*, p.145). He also suggests, among other things, that in the Preface to the *Phenomenology of Spirit*, Hegel distances himself from Schelling by emphasizing the value of mediation using examples taken from *De Anima* and by arguing in Aristotelian fashion that the true is not an identity, but “the circle that presupposes its end as its goal, having its end also as its beginning,” referring to it as “God’s life” (*PhG* 19), etc. Ferrarin argues that, for Hegel, “Schelling’s supposed horror for mediation and for the development from *dunamis* to *energeia* is a peculiar ignorance of the nature of “reason,” which is “*purposive activity (das Zweckmässige Tun)*” (*W* 3: 26, *PhS* 12). This is one of the earliest and yet decisive occurrences of internal finality as integral to the Absolute in Hegel. ... Aristotelian immanent teleology is of decisive importance for Hegel’s own definition of reason and the Absolute...” (*Hegel and Aristotle*, pp.145-146; see also pp.406-409)

Aristotle's theory of Ideas and his conception of reason as essentially activity are two key elements that Hegel's speculative philosophy claims to bring closer together and recover in a proper scientific form. Thus, the self-consciousness of reason, insofar as it is fully actualized both as the knowledge of Nature and of freedom, becomes *the absolute Idea* – thought that in thinking itself is absolutely *free* both in the shape of theoretical reason and of the will. Specific Ideas, such as the Idea of Nature or the Idea of Right, are ways in which *the Idea* actualizes itself in particular domains. Hegel conceives *the Idea* as thought that is not only essentially productive of and immanent in reality, but is also conscious of itself as such. It is, he writes, “the absolute end or the Good, for it only exists for its own sake.”²⁵² It does not need anything external to make it true, but rather, as Hegel puts it, is itself *the Truth*. And as *the Truth*, it is the proper subject matter of philosophy. Hegel suggests that Aristotle came close to the very same standpoint with his notion of divine intellect as “*hê noêsis noêseôs noêsis*”²⁵³ – thinking that is thinking of thinking – that also manifests itself as the visible heavens.

The notion of reason as *essentially free* and *self-productive* thought that Hegel finds in Aristotle is particularly important for his conception of philosophy as pure rational science. It presents philosophical science (the self-knowledge of thought) itself as *essentially free, self-productive “infinite thinking of reason”*.²⁵⁴ We are entitled to this expression, Hegel argues, because it captures the essential infinite nature of thought, or of self-consciousness as the form of all thought:

²⁵² (LHP, vol. 2, p.151).

²⁵³ See (*Metaphysics*, 1074b33-4).

²⁵⁴ (EL §28A).

“If we adhere to the modern notion that thinking is always restricted, then the expression “infinite thinking” may appear quite astonishing. **But, in fact, thinking is inwardly and essentially infinite...** [T]he *I*, or *thinking*, is infinite because it is related *in thinking to an object that is itself*. An object as such is an other, something negative that confronts me. But if **thinking thinks itself**, then it has an object that is at the same time not an object, i.e., an object that is sublated, transformed into **an idea. Thus thinking as such, thinking in its purity, does not have any restriction within itself.** Thinking is only finite insofar as it stays within restricted determinations, which it holds to be ultimate.” (EL §28A, my bold)

Hegel’s conception of the object and the method of philosophy as the “*infinite thinking of reason*” lies at the center of his critique of modern philosophical approaches, which, to him, exemplify the “*finite thinking of the mere understanding*”. They exemplify thinking that is finite insofar as they *assume* thought to be restricted or limited in some way. As we shall see, one of the most problematic of these restrictions, in Hegel’s view, is the uncritically *fixed opposition* between thought and its object, which limits knowledge to cognition through “mere” concepts of the understanding.

If philosophy is to be possible as a pure science, Hegel argues, it must not presuppose restrictions that undermine its very ability to prove its possibility as such a science; as *actual* knowledge of *the Idea*. Given that thought is essentially infinite, it can genuinely *know* itself only if it is able fully to comprehend this infinity. Kant is right, Hegel claims, that what is infinite cannot be fully known through finite predicates, but he is wrong to *conclude* that we cannot have knowledge of the infinite. What we need is a completely new and properly philosophical method adequate to the “infinite thinking of reason”.

1.3

Prior to his own work, Hegel claims, such a method has not been found,²⁵⁵ not even by Aristotle. This brings me to one of the very few negative aspects of his assessment of

²⁵⁵ See, for example, the *Science of Logic* (SL § 62).

Aristotle's philosophy – its lack of systematicity, and, therefore, its inability to make explicit the true nature of its subject matter, which is thought thinking itself.²⁵⁶

Although Aristotle uses pure theoretical sciences as examples of thought having itself for its object²⁵⁷, he does not fully appreciate what this means for the method and form of philosophical science. In philosophical investigation, reason is actively seeking self-knowledge, the *truth* about its own activity. That is, philosophical science (if it is possible) is thinking the agreement of thought (as the activity of the thinking subject) with itself (thought that is thinkable in the object). As such, philosophy is productive of the truth and actuality of its object, and of its own truth, insofar as it becomes fully conscious of its own productive activity. That is, according to Hegel, philosophy can become genuine self-knowledge of reason only if its form has the self-relating character of the thinking self.

Because it is essentially self-relating and self-organizing, reason's self-knowledge is not a mere taxonomy of elements,

“not a systematic whole which is correctly divided into its parts, and in which no part is forgotten, all being set forth in their proper order, but one in which there is one living organic whole, in which each part is held to be a part, and the whole alone as such is true.” (LHP, vol. 2, p.223)

Yet, in Aristotle's philosophy this kind of systematicity cannot be found. Rather,

“parts are empirically selected and placed together in such a way that each part is independently recognized as a determinate conception, without being taken into the connecting movement of the science.” (LHP, vol. 2, p.151)

²⁵⁶ In particular, Hegel notes that it is not put together as a self-organizing whole that evolves from a single rational principle – the Idea of thought thinking itself. See e.g., *Lectures on the History of Philosophy*, (LHP vol. 2, p.229).

²⁵⁷ Aristotle says, for example, that “speculative knowledge and its object are identical” (*De Anima*, III.5 410a5) and that “in the [pure] theoretical sciences the formula or the act of thinking, *is* the object” (*Metaphysics*, 1075a2-3).

Aristotle, Hegel argues, grasps *the Idea* of self-reflecting thought as “*the highest truth*”, but he does not recognize it as *the whole* truth, as it were, – the universal principle that grounds “the manifold of the natural and spiritual universe”. In commenting on the passage from Aristotle’s *Metaphysics* quoted at the beginning of this section, Hegel stresses both the affinity of his own conception of *the Idea* and of *Truth* with Aristotle’s thought and the difference we just noted:

“We in our way of speaking designate the Absolute, the True, as the unity of subjectivity and objectivity..., and **Aristotle busied himself with these same speculations**, the deepest forms of speculation even of the present day, and he has expressed them with the greatest definiteness. **With Aristotle it is thus no dry identity of the abstract understanding that is indicated ...but energy**, is for him what is most to be revered, God. Unity is thus a poor, unphilosophic expression, and true Philosophy is not the system of identity; **its principle is a unity which is activity, movement, repulsion**, and thus, in being different, is at the same time identical with itself. If Aristotle had made the jejune identity of understanding, or experience, his principle, he would never have risen to a speculative *Idea* like this, wherein individuality and activity are placed higher than universal potentiality. **Thought, as the object of thought, is nothing else than the absolute *Idea* regarded as in itself...**He does not say that it alone is truth, that all is summed up in Thought, but he says that it is the first, the strongest, the most honorable. We, on the other hand, say that Thought, as that which relates to itself, has existence, or is the truth; that Thought comprehends the whole of Truth...” (LHP, vol. 2, pp.148-149)

Hegel argues that Aristotle does not yet recognize *the Idea* as the principle that makes both nature and our spiritual life actual and thoroughly intelligible. Thus, knowledge of the natural and spiritual world becomes, for Aristotle, a collection of truths independent of the conception of reason as thought thinking itself.²⁵⁸ The Thought, as the object of thought, *the Idea*, is still only “in-itself”, or *implicit*, in Aristotle. For *the Idea* to become

²⁵⁸ It “constitutes outside of that idea a long series of particular conceptions, which are external to one another, and in which a unifying principle, led through the particular [NP: from which particular conceptions are shown to be organically developed as both manifestations of this principle and its parts] is wanting. The highest *Idea* with Aristotle consequently once more stands only as a particular in its own place and without being the principle of his whole philosophy.” (LHP, vol. 2, p.229)

explicit – for reason to know itself as embodied and manifested both in the life of the mind and in physical nature – philosophy must become properly systematic. “Hence the next necessity in Philosophy,” Hegel declares, “is that *the whole extent of what is known* must appear *as one organization of the Concept*”.²⁵⁹ In other words, philosophy must show how all the aspects and parts of knowledge are developed from a single principle, from the Concept of self-conscious, self-producing thought, or thought that thinks itself.

I began with this sketch of Hegel’s understanding of Aristotle because it highlights both what Hegel takes to be the *object* of philosophy as pure rational science – *the Idea* as the whole, of which Ideas of Life, of Nature, of History, of Right, and the like, are manifestations and organic parts – and the need for the *method* adequate to this object. That is, if philosophy is the investigation of thought thinking itself, its method has to allow us to grasp the *unrestricted* and *productive* nature of thought. Let me now consider Hegel’s method more closely.

2. Hegel’s philosophical method and Goethean “objective thinking”

2.1

Recall the two features of Goethe’s approach that allow him to describe it as “objective thinking.” First, it rejects *external imposition* of a *presupposed conceptual scheme* onto its object and requires that inquiry be guided by the nature of the object as it presents itself to the researcher. Given that experiment, for Goethe, is not an instrumental set-up for the extraction of truth, but an activity that mediates between the investigating subject and the object of study, its progression must be gradually shaped by the nature of

²⁵⁹ (LHP, vol. 2, p.230).

the object itself as it manifests itself through experience.²⁶⁰ Thus, the way the investigation proceeds *cannot be planned out prior to the investigation itself*.

Secondly, Goethe's scientific investigator does not seek a *fundamental principle* or *formula that abstracts* from individual cases and particular manifestations of the object of inquiry. Rather, his aim is comprehension of the essential nature of the subject matter (its Idea or *Urphänomen*) **in its phenomenal fullness**. He seeks to understand the inner necessity or rationality of the object of study expressed in a complete sequence of its basic phenomenal manifestations. This includes comprehending the nature of transitions, continuities and differences, between these manifestations (the grounds of their emergence, patterns of development and change, and disappearance).²⁶¹ Goethe's "objective thinking" is therefore particularly and uniquely suitable, at least in his own view, to the study of living beings whose organic nature cannot be grasped through mechanical laws to which the received Newtonian-style scientific procedure is limited.

It is worth noting that Goethe seems to struggle to capture determinately the way a scientific experiment is supposed to progress. What makes it such a challenging task? The answer, I submit, is that this is not his task at all. It is precisely because, according to Goethe, a method cannot be set out independently of the object of study, that an attempt determinately to specify a strict scientific method that fits any object whatsoever would be both wrongheaded and futile. What Goethe describes and defends in his

²⁶⁰ Note that it is characteristic of phenomenological approaches in general to take the method and phenomena as inseparable and comprehended together. Phenomenological investigation is both an analysis of the individual phenomena in their natural transitions and a synthesis of the phenomenological whole including comprehension of the relationship of each of its individual parts to this whole.

²⁶¹ The inquiry becomes a kind of a circle, which starts with a certain phenomenal manifestation of its object, then follows the object through *the complete course* of its manifestations, so that finally all these manifestations, including the starting point, are now thoroughly understood through their role within the whole.

methodological writings is not a universal method that can be specified through a set of formal rules, but rather a proper scientific attitude with which a researcher is to approach the study of natural things in order to grasp their essence according to the method properly fitting their nature. As we shall see in the following chapter, this point is central to Goethe's own assessment of Hegel's appropriation of his methodological ideas.

There is a deep affinity between Goethe's approach to the study of self-producing and self-organizing nature, his idea of "objective thinking" or thinking *with* the object and the methodology Hegel thinks the philosopher should employ in investigating the nature of thought. To a large extent, this affinity is rooted in Hegel's conception of the object of philosophy as self-actualizing, self-determining and, in this sense, *free* thought. But, there is also an obvious difference between their projects which raises a possible problem for the connection I want to draw between Goethe's method of "intuitive understanding" and Hegel's method of philosophical science.

The difference is this. Goethe's methodological thought is concerned exclusively with natural science. His scientific researcher aims to gain genuine understanding of living beings and active principles in nature (light as the active principle that makes possible the phenomena of color, formative principles of plant and animal life, and the like) as they truly are. In achieving an intuitive understanding of *Urphänomene*, the Goethean researcher grasps *the Idea* that is *not* identical to the observing scientific consciousness; the *Urphänomen* is unproblematically independent from the researcher's own actuality as a reflecting subject.²⁶² Hegel's sole concern, on the other hand, is with philosophical

²⁶² The lines seem to blur a bit when we consider a Goethean researcher investigating human body or psychology, for example. But even in cases of this kind, the researcher still remains an external observer whose actuality as a reflecting subject does not itself depend on his activity of conducting this kind of research.

science, whose object is not *merely* living and self-organizing, but free, self-conscious, self-determining rational *thought*. The philosophical investigation, as itself an activity of reason, must proceed according to the method *intrinsic* to this very activity of its object.²⁶³ Its object is thought that *gains actuality* through the activity of the knowing

²⁶³ Hegel was hardly alone in conceiving of reason this way. The idea that philosophy is concerned with reason as a self-organizing whole is, of course, already present to a certain degree in Kant. It acquires a particular focus and Goethean shape with Fichte. Fichte, who intended to dedicate the (unfinished) *New Version of the Wissenschaftslehre* to Goethe, “the creator and inventor of the German imagination,”²⁶³ describes the object – the knowledge of the knowing subject – and the method of his *Science of Knowledge* in strikingly Goethean terms: “What the [*Wissenschaftslehre*] takes as the object of its thinking is not some dead concept that is related only passively to the inquiry in question.... Instead the object reflected upon within the *Wissenschaftslehre* is something vital and active, something that generates cognitions out of itself by means of itself, while the philosopher merely observes what happens. The task played by the philosopher in this process is no more than this: His task is to engage this living subject in purposeful activity, **to observe** this activity, **to apprehend** it, and **to comprehend it as a single, unified activity**. **He conducts an experiment**. It is up to him... to attend to these appearances, **to survey them accurately** and **to connect them with one another**. But it is not for him to decide how the object should manifest itself. This is something determined by the object itself; and **he would be working directly counter to his own goal were he not to subordinate himself to this object**, and were he instead to take an active role in the development of what appears. In contrast, the philosopher of the previously mentioned sort is engaged in the manufacture of an artificial product. All that concerns him is the material of which the object upon which he is working consists; he is not at all concerned with any inner, self-active energy or force of this object itself... He succeeds in manufacturing something from this dead mass only by employing his own energy, guided solely by a concept he himself has previously constructed... The *Wissenschaftslehre* contains two very different series of mental acting: that of the I the philosopher is observing, as well as the series consisting of the philosopher’s own observations. The opposed manner of philosophizing to which I have just referred contains but a single series of thinking, namely, the series of philosopher’s own thoughts, for the content or object of his thinking is not presented as something that is itself engaged in thinking.” (*The Second Introduction to Wissenschaftslehre*, I, 4:454 (209–10), pp. 36–7, my emphasis). Upon reading the first part of the lecture on the *Foundations of the Entire Wissenschaftslehre*, Goethe writes to Fichte, “I thank you kindly for the first installment of the *Wissenschaftslehre*, in which I already see the hopes fulfilled which the introduction inspired in me; it contains nothing... which does not willingly conform to my habitual way of thinking...” (*Jabr.* 2:177-78, quoted in Eckart Förster, “The Twenty-Five Years of Philosophy”, p.176).

Although Hegel is critical of Fichte’s “subjective idealism” in general, he praises *Wissenschaftslehre*’s methodological contributions – its setting forth the idea of philosophy as a system in which everything is derived from a single principle in a “scientifically consistent way” (LHP Vol.III, pp. 481-3, pp.499-501). Indeed, as is well-recognized, the two-series “experimental” method of *Wissenschaftslehre*. intended to elevate us, as philosophical inquirers, to the standpoint of philosophy as science by following and observing the development of *the self* in its activity of thinking – has a close analogue in the two-series structure of Hegel’s *Phenomenology of Spirit*. In the first place, Hegel’s criticism of Fichte’s philosophy targets its modern-day presupposition that reason belongs merely to a cognizing subject and stands over and against that which it knows. Relatedly, Hegel (and Schelling) take the subjective idealism of Fichte and Kant to reside in the fact that the principle of all philosophy for them is an empty, merely formal, self-consciousness of a reflecting subject. This excludes from the start the possibility that the world could *also* be in itself rational. This is what makes Fichte’s philosophy a kind of *subjective* thinking, on Hegel’s view, even though Fichte’s attempt to follow Goethe’s approach in “experimenting” on this object is a step towards genuinely scientific systematicity in philosophy. This presupposed subjectivity of reason is already reflected in the starting point of *Wissenschaftslehre* – the immediate consciousness of the self – as an

subject seeking this knowledge. That is, Hegel's philosophical science is not mere self-*observation* of reason; rather, it is *self*-observation and *self*-actualization. The difference between Hegel's and Goethe's approach can then be put this way. Whereas Hegel's procedure is, crucially, *self*-observation, Goethe's, just as importantly, *is not*. So does it make sense to speak of Hegel's method as "broadly Goethean"?

As I mentioned in my introductory remarks, in calling Hegel's method "broadly Goethean", I do not mean to claim that it is simply Goethe's method. What I hope to show is that Hegel's scientific procedure in philosophy is centrally motivated by considerations closely parallel to those that motivate Goethe's approach in natural science, and that this results in Hegel's adapting, as it were, central features of Goethe's method to philosophical investigation.

The discussion so far already indicates what these features are. Hegel's conception of philosophical science as the Aristotelian "thinking that is thinking of thinking" requires that philosophical investigation proceed in a way that is structurally analogous to Goethean "objective thinking". It must not place any fixed restrictions on thought, or make assumptions about its essential nature and its relation to the world. Thus, on the one hand, philosophical investigation must neither assume that our reason is merely discursive nor suppose that we can have knowledge of synthetic universals. On the other hand, it must not preclude either possibility from the outset. Rather, it must proceed in a

absolutely certain fact. This starting point is, in a way, one of the key moments that still tie Fichte's methodology to that of Kant.

So the following picture (in a rough, stripped-down form) seems to emerge for Hegel. With Aristotle, thought has genuine objectivity – for, "to say that there is understanding, or reason, **in the world** is exactly what is contained in the expression "objective thought"" (EL §24) – yet his philosophy lacks the systematicity appropriate to its object. With Fichte, the systematic philosophical method as Goethean "objective thinking" is beginning to emerge, yet it is undermined by the *presupposed* subjectivity and, therefore, finitude of reason. In my view, Hegel's conception of philosophical science results from his reflection on the transition from Kant through Fichte and Goethe against the background of his Aristotelianism, but I lack space to fill out the Fichtean part of the story and must leave it for another time.

way that is inseparable from its object. It must follow the activity and development of thought through all its stages and transformations, aiming to comprehend the nature (the inner necessity and unity) of this activity. In other words, Hegel's conception of philosophical science brings together Aristotle's and Goethe's insights.²⁶⁴

2.2

Hegel's specific positive claims about "the only true" scientific method in philosophy, as well as his critique of the modern philosophical methodologies, highlight the extent to which his philosophy shares not only the motivation, but also the specific characteristics, of Goethe's methodological outlook. Consider, for example, Hegel's discussions of method in the *Phenomenology* and the *Encyclopedia Logic*, which emphasize the very features Goethe insists on as necessary for true scientific knowledge.

First, philosophical knowledge must itself be an externally unrestricted "infinite thinking of reason" that has two related characteristics:

- (i) It is **immanent** thinking, or thinking with the object rather than external reflection on it.

In the Goethean spirit, Hegel argues that philosophical science cannot have its investigation planned out in advance. Its method cannot be borrowed from elsewhere, but must emerge through and be shaped by the course of philosophical investigation itself. In describing the method capable of producing the organic systematicity necessary for pure rational science in the *Preface to the Phenomenology*, Hegel writes, for example:

²⁶⁴ This is not to minimize the importance of other influences on the development of Hegel's methodological views. Hegel's adaptation of Goethe's insight to philosophy is no doubt, mediated by Fichte's view that the form of the philosophical reflection should manifest the self-relating of the thinking self and by Hegel's engagement with Schelling's and Spinoza's thought among others.

“Science can become an organic system only by **the inherent life of the Concept**. In science the determinateness, which [before] was taken from the schema and stuck on to existing facts in **external fashion**, is the self directing inner soul of the concrete content... True scientific knowledge ... demands **abandonment to the very life of the object**, or, which means the same thing, claims to have before it **the inner necessity controlling the object**, and to express this only.” (PhG §53, my emphasis)

“This nature of scientific method, which consists partly in being inseparable from the content, and partly in spontaneously determining the rhythm of its movement, has...its proper exposition in speculative philosophy” (PhG §57).²⁶⁵

- (ii) It is **free** thinking that does not bring in fixed presuppositions or make unjustified assumptions.

Genuine philosophical knowledge requires approaching its object **without hidden or fixed presuppositions** about either the content or the way in which this content can be acquired and comprehended, or both. That is, according to Hegel, the self-investigation of reason must proceed without taking anything (any principle or fact) as foundational or forever unchanging.²⁶⁶ This implies, for example, not assuming that the logic of thought is restricted to finite thought-determinations of the understanding that are taken as ultimately determined and self-standing. By these, Hegel means, primarily, traditional philosophical categories, such as the category of unity as sharply contrasted with plurality, infinity as sharply contrasted with finitude, and the like. What we have to

²⁶⁵ In the next paragraph Hegel describes the way he proceeds as an effort to let the content of his Science, that is thought, “move spontaneously of its own nature, by its own nature, by the self as its own self, and then to contemplate this movement. This refusal to intrude into the immanent rhythm of the Concept, either arbitrarily or with wisdom obtained from elsewhere, constitutes a restraint which is itself an essential moment of the Concept.” (PhG §58)

²⁶⁶ Although at each stage of this investigation something may have to be presupposed, the philosophical investigation must make these presuppositions explicit and subject them to rational scrutiny. Here too, we are reminded of Goethe’s idea that although it is impossible to approach the object of knowledge without any presuppositions at all, that every fact is already a theory, that “we theorize every time we take a careful look at the world,” “[t]he ability to do this with clarity of mind, with self-knowledge, **in a free way**, and...with irony, is a skill we will need in order to avoid the pitfalls of abstraction and attain the results we desire.” (“The Contemplation of Nature”, GOS p.90, my emphasis)

realize, Hegel argues, is that the fixity of the concepts of the understanding, particularly when taken as ultimate and pushed to the extreme, makes them essentially self-contradictory. This can be seen even in everyday notions and sayings, as when it is said that extreme pain and joy pass into each other, that extremes of anarchy and despotism tend to lead to one another, and even in some legal proverbs, such as “Summum ius summa iniuria” which means that abstract justice driven to the extreme overturns into injustice. This dialectic, Hegel claims, belongs to the very nature of finite concepts of the understanding and shows that their claim to ultimate fixity and determinacy is unjustified.²⁶⁷

In his mature work, Hegel repeatedly warns against fixed presuppositions, which are characteristic, in his view, of practically all modern philosophy:

“All...presuppositions or assumptions must equally be given up when we enter into the Science, whether they are taken from [intuitive] representation or from thinking; for it is this Science, in which all determinations of this sort must first be investigated, and in which their meaning and validity like that of their antithesis must be [re]cognized.” (EL §78)

A proper entrance into philosophical science requires giving up the presupposition that rationality is essentially subjective (that it belongs *merely* to cognition and *not also* to what it cognizes). At the same time, philosophy cannot simply presuppose that the world is rational in itself. The true relation between reason and the world can only be discovered and comprehended through a genuinely critical philosophical investigation

²⁶⁷ In order to overcome the natural contradictions into which finite (abstract) conceptions necessarily fall, thought must embrace what before seemed to be contradictory determinations within a higher, more concrete, concept. They then can be seen as particular aspects of this higher concept, still opposite, yet united. This dialectic, Hegel argues, is, in general, “the principle of all motion, of all life, and of all activity in actuality”. And, he adds, “Equally, the dialectical is also the soul of all genuinely scientific cognition” (EL §81 A1); “[it] constitutes the moving soul of scientific progression, and it is the principle through which alone immanent coherence and necessity enter into the content of science, just as all genuine non-external elevation above the finite is to be found in this principle” (EL §81).

that does not, from the outset, preclude certain outcomes or unwittingly load the deck in favor of a particular conception.

In the *Phenomenology* and in the *Science of Logic* itself, Hegel claims to work out a philosophical science without presuppositions of this kind.²⁶⁸ Indeed, on Hegel's conception of philosophy, the way in which the science of thought proceeds cannot be assumed in advance, as in traditional sciences, which treat their subject matter and scientific method "only as premises taken for granted" and "as forms of definitions and such-like presupposed as familiar and accepted". Philosophical science, and the science of Logic, in particular, "cannot presuppose any of these forms of reflection and laws of thinking, for these constitute part of its own content and have first to be established within the science."²⁶⁹ I will not attempt to assess whether Hegel's philosophy is in fact presuppositionless. Doubts about it have been raised even by Hegel's earliest critics (Schelling, Feuerbach, and Kierkegaard among others), and it is still a matter of some controversy.²⁷⁰ At this point, my aim is simply to make explicit the broadly Goethean character of Hegel's conception of proper philosophical procedure.

Secondly, Hegel argues that philosophical investigation cannot step outside thought, as it were, or take anything for its starting point, but thought itself. To know the nature of the object of philosophy in its truth, we must follow its object through *the complete*

²⁶⁸ See, e.g. (SL pp.70-1).

²⁶⁹ (SL, p.43).

²⁷⁰ For contemporary arguments that Hegel's philosophy is not in fact presuppositionless see, e.g., Jürgen Habermas, *Erkenntnis und Interesse* (Frankfurt am Main: Suhrkamp Verlag, 1968, p.21) and Michael Rosen, *Hegel's Dialectic and its Criticism* (Cambridge University Press, 1982, p.42), and a recent illuminating treatment by Brady Bowman in *Hegel and the Metaphysics of Absolute Negativity* (Cambridge University Press, 2015). For an opposing view, see, e.g., Stephen Houlgate, *The Opening of Hegel's Logic*, pp.29-53).

course (or circle) of its manifestations or shapes. We can comprehend the nature of this object only by grasping the inner necessity of transitions between these manifestations. In the *Phenomenology*, in particular, Hegel stresses that our grasp of the necessity of transitions in the “succession of experiences through which consciousness passes” as intrinsic to the nature of consciousness itself is what raises this succession to the level of a “**scientific progression**”.²⁷¹

A genuinely philosophical method must be, in a sense, a Goethean-style “objective thinking” about thought itself:²⁷²

“[B]eing sunk into the material in hand, and following the course that such material takes, **true knowledge returns back into itself**, yet not before the content in **its fullness** is taken into itself....By this process the whole as such, surveying its entire content, itself emerges out of the wealth wherein its process of reflection seemed to be lost.” (PhG §53, my emphasis)

Only this kind of “objective thinking” allows the *possibility* of philosophy as a *pure rational science*, in Hegel’s sense, and can provide its proof. It alone does not from the start preclude the possibility that reason is, and can know itself as, the organic *unity* of the Concept (of thought thinking itself) and the manifoldness of its existence in the world – as *the Idea*.

The object of philosophical science – *the Idea* (as thought thinking itself) – is not dependent on anything outside itself for its truth; it generates and structures its own content internally, through its own logical development, so to speak. For example, in the practical sphere, the completely articulated system of rights that fully realize personal, moral, and political freedom is supposed to be generated through inner logical

²⁷¹ (PhG §87).

²⁷² Philosophy, Hegel writes, “is the process that creates its own moments in its course, and goes through them all; and **the whole of this movement constitutes its positive content and its truth**”. (PhG §47)

development of *the Idea*, which in the practical domain has the form of *the Idea of right*. Hegel's *Philosophy of Right*, which I consider in detail in the next chapter, traces the development of *the Idea of right* through its various necessary stages and transitions towards the system of rights that makes freedom fully actual. Thus, the concept of right first appears as the system of private right, which proves to generate internal contradictions that necessitate the transition to the system of moral rights. The proper realization of the insights of the moral standpoint and resolution of its own internally-generated problems, in turn, requires a transition to the system of social institutions and rights of Ethical Life. In his works on Logic, Hegel exhibits a similar kind of self-articulation and self-actualization of the Idea into the logical categories.

The rational science of *the Idea*, Hegel argues, must follow this self-development through all of its moments or manifestations, from one moment to the next, and grasp the whole as a kind of circle (an organized whole) in which each part is both an end and a means for all others and of the whole which also grounds them. The *Phenomenology*, for example, follows the complete series of "shapes of consciousness" or "the course of experience" of consciousness that is supposed to be grasped as a whole. In grasping this series as single experience of consciousness the philosophical investigator grasps the inner necessity of its movement, that leads him through a proof, as it were, of the identity of rational and actual and, at the same time, of the necessity of the standpoint of philosophical science, or of absolute knowing, as Hegel calls it.

In following *the Idea* through its moments, the system of philosophy itself becomes a kind of self-organizing and self-justifying circle. It returns to its beginning, now with a deeper understanding of the role and necessity of various stages and forms of thought

within the whole.²⁷³ Hegel compares *the Idea* to an old man “who utters the same religious statements as the child, but for whom they carry the significance of his whole life”.²⁷⁴ Like human life in general and the events that make it up, the living development of the whole constitutes the content, the true significance, and the end of its particular stages.

Is this kind of philosophical science possible? Given Hegel’s methodological commitments, this possibility cannot be simply *presupposed*; it must be proved, and he claims to have *proved* it in the *Phenomenology*. In the Preface to the work, he declares his task this way:

“The systematic development of truth in scientific form can alone be the true shape in which truth exists. **To help to bring philosophy nearer to the form of science** – that goal where it can lay aside the name of *love* of knowledge and be actual knowledge – **that is what I have set before me.**” (PhG §5)

The *Phenomenology* is supposed to *prove* that rationality is indeed immanent in everything in the natural and spiritual world; that thought is actual, and therefore, *objective* in the sense in which Hegel describes it in the *Encyclopedia Logic* – “to say that

²⁷³ “Each of the parts of philosophy is a philosophical whole, a circle rounded and complete in itself. In each of these parts, however, the philosophical Idea is found in a particular specificity or medium. The single circle, because it is a real totality, bursts through the limits imposed by its special medium, and gives rise to a wider circle. The whole of philosophy in this way resembles a *circle of circles*. The Idea appears in each single circle, but, at the same time, the whole Idea is constituted by the system of these peculiar phases, and each is a necessary member of the organization.” (EL §15) Also see the *Philosophy of Right*: “Philosophy forms a circle. It has, since it must somehow make a beginning, a primary, directly given matter, which is not proved and is not a result. But this starting-point is simply relative, since from another point of view it appears as a result. Philosophy is a sequence, which does not hang in the air; it is not something that begins from nothing at all; on the contrary, it circles back into itself.” (PhR §2A) Also see , for example, the *Science of Logic* §102, §104, §§1804-1814, etc.

²⁷⁴ (EL §237A).

there is understanding, or reason, in the world is exactly what is contained in the expression “objective thought””.²⁷⁵

The method of Hegel’s philosophical science is the method inherent in *the Idea*; it is the logic of the activity of reason itself – “the method is nothing else than the structure of the whole in its pure and essential form”.^{276 277}

2.3

Even a brief reflection on the key themes in Hegel’s criticism of his predecessors shows it to be rooted in his methodological views. In the *Encyclopedia Logic*, Hegel contrasts the attitude of “objective thinking” with the three main “attitudes” or so-called “positions of thought with respect to objectivity”, dominant in modern philosophizing – the older rationalist metaphysics, empiricism and critical philosophy, and the doctrine of “immediate” or intuitive knowledge. All these attitudes, he claims, are dualistic; they simply presuppose an opposition between reason and the world, subjective and objective, universal and particular, albeit in different ways. Hegel’s criticism of the first two “attitudes” in particular puts into focus the features that make them fall short of “infinite” or “objective thinking”.

²⁷⁵ This meaning, he notes, “is precisely expressed by the Ancients when they say that *nous* governs the world, or by our own saying that there is reason in the world, by which we mean **that reason is the soul of the world, inhabits it, and is immanent in it, as its own, innermost nature, its universal**”. (EL §24; §24A1)

²⁷⁶ (PhG §48).

²⁷⁷ These considerations suggest that Hegel’s *Phenomenology of Spirit*, in particular, can be viewed as a kind of Goethean “experiment of a higher kind.” By following the experience of consciousness through a complete series of contiguous experiments (shapes of consciousness), we, as philosophical observers, are elevated to the standpoint of philosophy as science. The “experiment” of the *Phenomenology* mediates between the subject (the philosophical investigator) and the object of the investigation (the activity of thought and its relation to the world).

Both dogmatic metaphysics and empiricist philosophy, Hegel argues, exemplify thinking that is neither *free* nor *immanent* in the nature of thought. Both bring in fixed presuppositions about (i) the content of knowledge, (ii) the forms or categories of thought, and (iii) the method of knowing.

The older metaphysics assumes that the objects of philosophy are unconditioned totalities – God, the soul, the world.²⁷⁸ Yet it takes their content from representations belonging to popular conceptions or theology and simply tries to fit the similarly presupposed metaphysical categories to these representations. In other words, the method of the older metaphysics consists in attaching “finite” metaphysical categories – abstract universals such as existence (or *being-there*), simplicity, infinity, necessity, etc. – to its presupposed objects, without examining the true nature of these categories or attempting to justify their use. On this point, Hegel is in agreement with Kant. But, in addition, he stresses that the procedure of the older rationalism is an *external imposition* of the metaphysical categories on the objects of reason. “[T]he determinations (the predicates),” he writes, “are **found ready-made** in my representation, and **are attached to the object in a merely external way**. Genuine cognition of an object, on the other hand, has to be such that **the object determines itself from within itself**, and does not acquire its predicates in an external way” (EL §28).

Moreover, since finite predicates can never fully determine the unconditioned totalities that traditional metaphysics takes as its objects, this procedure cannot lead to genuine knowledge of these objects; at best, it can claim to *approximate* it. Unlike ancient Greek philosophy which set itself free by throwing away mythological

²⁷⁸ (EL §§29-31).

representations and prejudices, rationalist metaphysics, Hegel argues, *assumes* its content (e.g. God, soul, etc.) as something *given* and merely wants to know whether certain predicates can be attached to these objects (as in the propositions “God is eternal” or “the soul is a simple substance”, for example). It is, therefore, bound by its unjustified assumptions and is not “a *free* and *objective* thinking, for it [does] not allow the object to determine itself freely from within”.²⁷⁹

Empiricism, in Hegel’s view, suffers from the same defects that afflict the older metaphysics – it is neither *free* nor *immanent* thinking. To be sure, he considers empiricism to be an advance over dogmatic metaphysics, since it is concerned with concrete content present in experience rather than the supersensible. Hegel praises empiricists for making truth and knowledge dependent on what *is* (rather than what *merely ought to be* but never fully is) and on what we are able to see and experience for ourselves. “In Empiricism,” he writes, “there lies this great principle, that what is true must be in actuality and must be there for our perception.”²⁸⁰ But, empiricism is similarly uncritical and one-sided in presupposing this actuality as simply *given* to the senses and *external to rational thought*. It separates rationality from the raw matter *given* through the senses, and holds that “reason and unreason are *only subjective*, in other words, we have to accept the given as it is, and we have no right to ask whether, and to what extent, it is rational in itself”.²⁸¹ Yet, philosophy as pure rational science has the right and the obligation to ask this question and to answer it critically.

²⁷⁹ (EL §31A).

²⁸⁰ (EL §38).

²⁸¹ (EL §38A, my emphasis).

Moreover, Hegel points out that ostensibly anti-metaphysical empiricism operates under the fundamental illusion that it is free from presuppositions, yet, like older metaphysics, it simply helps itself to a number of “finite” or abstract metaphysical categories:

“it uses the metaphysical categories of matter, force, as well as those of one, many, universality, and the infinite, etc., and it goes on to draw *conclusions*, guided by categories of this sort, **presupposing and applying the forms of syllogising in the process**. It does all this without knowing that it thereby contains a metaphysics and is engaged in it, and that it is using **those categories and their connections** in a **totally uncritical and unconscious manner**.” (EL §38, my emphasis)

Despite all their differences, Hegel argues, both rationalist metaphysicians and empiricists hold on to unjustified presuppositions about the *content of knowledge*, the *forms of cognition*, and the *method of knowing*:

“The **presupposed content** of Empiricism is ... the sensible content of Nature and the content of finite spirit. Here we have before us a material that is finite, while in the older metaphysics we had one that was **infinite** (and that then was **made finite through the finite form of the understanding**). In Empiricism, we have **the same finitude of form**; in addition, **the content is now finite too**. Besides, **the method is the same in both ways of philosophizing, inasmuch as both begin from presuppositions that are taken to be something fixed**.” (EL §38A, my emphasis)

Now, the claim that scientific empiricism unconsciously contains a metaphysics is, of course, not new with Hegel. In the *Metaphysical Foundations of Natural Science*, Kant criticizes the so-called “mathematical physicists” for this very unreflective use of metaphysical categories.²⁸² What Hegel claims, however, is that Kant is *not critical enough* in his own investigation of the forms of thinking. Indeed, one of Hegel’s most well-known objections to Kant’s critique of theoretical reason is that he takes “the easy

²⁸² (MFNS 4:472).

way in his finding of the categories”, deriving them unsystematically from “*various kinds of judgment* already specified empirically in the traditional logic”.²⁸³

In saying that the forms of judgment, as well as various species of syllogisms, are specified empirically in the traditional logic, Hegel means that these logical forms are identified by analysis of ordinary judgments, or stipulated through definitions.²⁸⁴ These forms are put together into classifying tables that simply list them side by side (as “amalgams of given material”²⁸⁵) without an attempt to derive them from the nature of thought or to prove their necessity. Kant, in turn, takes this ready-made enumeration of the forms of judgment as a *given* starting point for deriving the categories of the understanding.²⁸⁶ For Hegel, this is one of the ways in which Kant’s critique imposes on philosophy a fixed conceptual scheme that limits cognition to “finite” (merely abstract universal) concepts of the understanding. Consequently, it is able to provide “only a *historical description* of thinking, and a mere inventory of the moments of consciousness”, rather than thoroughly rational articulation of the active nature of thought.²⁸⁷ “To be sure,” he adds, “this inventory is mainly correct; but the necessity of what is thus empirically apprehended is not discussed in the process”.²⁸⁸

²⁸³ (EL §42).

²⁸⁴ “In the present state of logic”, Hegel remarks in the *Science of Logic*, “one can scarcely recognize **even a trace of scientific method. It has roughly the form of an empirical science.**” (SL §62, my emphasis)

²⁸⁵ (SL §62).

²⁸⁶ See, e.g. (EL §42).

²⁸⁷ (EL §60A1, my emphasis). Here, Hegel seems to refer to the distinction between “historical” and rational cognition that Kant (following Wolff) himself draws in the *Critique of Pure Reason*: “Historical cognition is cognition *ex datis* [from what is given], rational cognition, however, cognition *ex principiis* [from principles]. However a cognition may have been given originally, it is still historical for him who possesses it if he cognizes it only to the degree and extent that it **had been given to him from elsewhere**, whether it has been given to him through immediate experience or told to him or even given to him through instruction (general cognitions).” (KrV A836/B864)

Hegel takes this “historical”, non-immanent, so to speak, character of Kant’s metaphysical deduction of the categories to reflect a deeper problem. Although reason itself is, for Kant, the arbiter of all truth, he inherits from empiricism the *presupposition* that rationality belongs only to the thought of a reflecting subject, which stands over and against the object of thought as it is in-itself. For Hegel, a crucial aspect of this presupposed “divorce between concept and reality”²⁸⁹ is that even Kant’s re-conceived notion of objectivity (as whatever “measures up to thought (the universal and the necessary)”²⁹⁰) is “subjective in its form”. Moreover, it stands sharply *opposed to* Kant’s notion of subjectivity (as the particular and contingent given through the senses). In Hegel’s eyes, this sharp separation and opposition of thought and its content is an unjustified *assumption*, a feigned hypothesis, as it were, that, from the outset, excludes the possibility that thought might be objective in Hegel’s sense.

Now, it is important to note here that the opposition between the in-itself and rational form as something that belongs to the mind of the subject in Kant’s system emerges as a response to an intelligible epistemological *problem*: How can we have *a priori* knowledge of *objects*? Or, what comes to the same: How can we have knowledge of *objective, necessary* relations? While Hegel believes that Kant’s method, in effect, presupposes dualism between the in-itself and rational form *as subjective thought* (hence, the label “subjective idealism”), in thinking about the proper philosophical method, he himself has to worry about making an unjustified *assumption*, namely that the rational

²⁸⁸ (EL §60A1).

²⁸⁹ (EL §55).

²⁹⁰ (EL §41A2).

knowledge he envisions is possible. As we have seen, Hegel does not simply want to presuppose that this rational knowledge is possible for us or to refuse on principle to demonstrate this knowledge (as Schelling does, for example). It is fair to say that the method of the *Phenomenology* emerges, in part, in response to pressures generated by Kant's epistemological problem.²⁹¹ Yet, for Hegel, this response takes a distinctively Goethean shape.

In the *Science of Logic*, Hegel describes the *Phenomenology* as the sole possible justification or "deduction" of the *concept* of philosophy as science of *the Idea*. He writes:

"In the *Phenomenology of Spirit* I have exhibited consciousness in its movement onwards from the first immediate opposition itself and the object to absolute knowing. The path of this movement goes through every form of *the relation of consciousness to the object* and has **the Concept of science for its result.**" (SL p.48, my emphasis)

The *Phenomenology* claims to achieve this result by proceeding in a thoroughly non-dogmatic, critical manner that suspends all presuppositions about the nature of thought and follows the inner logical development and articulation of thought itself. On Hegel's view, this procedure demonstrates the necessity with which the concept of philosophy as science (as *actual* knowledge rather than a mere *love* of knowledge) of *the Idea* emerges

²⁹¹ I am grateful to Bill Bristow, for stressing this point to me. Although Goethe is not concerned with this exact problem, he, like the natural philosophers of the Enlightenment, is concerned with the parallel problem in natural science: How can we have knowledge of things and active principles in nature as they truly are? Goethe develops his methodology in an attempt to answer this problem, particularly in light of Kant's analysis of natural purposiveness and his conclusions about the impossibility of knowledge of organized beings *as such* through mechanical laws, and Goethe's own bitter disappointment with the Newtonian method in natural philosophy. While Hegel's project is not Goethe's project, their methods are motivated by analogous concerns. They both seek genuine knowledge of that which is self-active, self-productive, and in itself true, even if for Goethe, this is knowledge of nature and, for Hegel, this is pure rational knowledge of thought.

from the nature of thought as a culmination of this development.²⁹² At the same time, Hegel takes it to show that Kantian notions of objectivity and subjectivity are only abstracted aspects of the *actuality* of thought that thinks itself. It is this *actuality* that, for Hegel, is “true objectivity”:

”[E]ven **the objectivity of thinking** in Kant’s sense is itself again **only subjective in its form**, because, according to Kant, thoughts, although they are universal and necessary determinations, are still **only our thoughts**, and are cut off from what the thing is in-itself by an impassible gulf. On the contrary, **the true objectivity of thinking** consists in this: that **thoughts are not merely our thoughts, but at the same time the In-itself of things** and of whatever else is objective.” (EL §41A2, my emphasis; SL p.49)

Yet, from Hegel’s point of view, the methods of finite cognition favored by modern philosophers uncritically cut off from the start the possibility of this “true objectivity of thinking” and of science whose content is “objective thinking”. In the remainder of this chapter, I consider what Hegel finds problematic with the method of analysis followed by synthesis, in particular.

3. Hegel’s critique of “finite” methods of Analysis and Synthesis

3.1

In his mature work²⁹³, Hegel makes a number of direct criticisms of the received philosophical use of the methods of analysis and synthesis (including their Newtonian-style juxtaposition characteristic of Kantian philosophy) as methods of finite cognition. As with Hegel’s analysis of modern attitudes of thought towards objectivity, this line of

²⁹² In the *Phenomenology*, Hegel puts it this way: “The inner necessity that knowledge should be science lies in its very nature; and the adequate and sufficient explanation for this lies simply and solely in the systematic exposition of philosophy itself.” (PhG §5)

²⁹³ See e.g., the *Phenomenology*, the *Science of Logic*, and the *Encyclopedia Logic*.

criticism is directed precisely at the features that make these methods incompatible with “objective thinking”. Briefly, it is centered on two points:

- (i) The method of analysis followed by synthesis is *external* to the subject matter of philosophy – it is borrowed (uncritically) from mathematics and the empirical sciences; it is, therefore, an imposition on philosophy of an external conceptual scheme.

While praising Kant’s insistence that philosophical knowledge requires self-validation, Hegel argues that Kant cannot fulfill this requirement because he follows empiricism in uncritically adopting the prevalent natural-scientific methodology of his time.²⁹⁴ The analytic stage of this method of cognition is a kind of dissection of our cognitive faculties²⁹⁵ that separates various elements or moments of cognition (starting with a separation of sensibility and understanding), splitting the purely formal, *a priori*, aspects from the specificities of their activity and use. Yet Hegel contends that this method is not appropriate for reason’s self-investigation, which aims to comprehend its own self-conscious, self-determining nature (if we are not to preclude from the start the possibility of self-knowledge of reason as *free* thought that is *actual*). Rather, it is suited primarily to mathematics concerned as it is with abstract objects (abstract determinations of space and even more abstract algebraic structures) to which the concepts of activity, development and self-organization simply do not apply²⁹⁶. Philosophy, as thinking about thought, is

²⁹⁴ Kant’s theoretical philosophy in particular, having borrowed its method from subordinate disciplines, he claims, “cannot have had any influence on the way we deal with the sciences. *It leaves the categories and the usual method of cognition entirely uncontested*” (EL §60).

²⁹⁵ See, e.g., (KrV B89-90/A64-5).

²⁹⁶ Hegel makes this point repeatedly, in the *Phenomenology*, in the *Science of Logic*, and in the *Encyclopedia Logic*. Here, I discuss his criticism in relation to the analysis/synthesis model in particular, although it is an aspect of Hegel’s criticism of all modern philosophical methodology in general. In the

essentially “objective thinking”, thinking that is *immanent in* its unique object. It, therefore, requires its own and “an altogether new concept of scientific procedure,”

“Philosophy, **if it would be science**, cannot...borrow its method from a subordinate science like mathematics any more than it can remain satisfied with categorical assurances of inner intuition, or employ arguments based on grounds adduced by external reflection. On the contrary, **it can be only the nature of the content itself which spontaneously develops itself in a scientific method of knowing**, since it is at the same time the reflection of the content itself which first posits and generates its determinate character.” (SL §8, p.27, my emphasis)²⁹⁷

Given that the object of philosophy is *thought that thinks itself*, the thinking subject, the object, and the method of philosophy are inseparable.

(ii) Both analytic and synthetic stages involve fixed presuppositions, making them “**unfree**” or “**finite**” methods of the “mere understanding”.

Both analytic and synthetic stages *presuppose* the strict separation between cognition and the object of inquiry as it is in-itself, independently of thought.

The starting point of analysis is always something that is taken as given or certain, be it experience, the articles of faith, facts of consciousness, logic, or something else. It is assumed that analysis can arrive at the *definitions* of the *fundamental* principles governing its object. Yet, definitions tend to vary significantly depending on what particular cases and elements of experience were the starting points of analysis and on the point of view from which the analytic inquiry was conducted. So that, “the richer the

Science of Logic, Hegel writes, for example: “Before [the] dead bones of logic can be quickened by spirit, and so become possessed of a substantial, significant content, **its method must be that which alone can enable it to be pure science. In the present state of logic one can scarcely recognize even a trace of scientific method. It has roughly the form of an empirical science...** Hitherto **philosophy had not found its method**; it regarded with envy the systematic structure of mathematics, and, as we have said, borrowed it or had recourse to the method of sciences which are only amalgams of given material, empirical propositions and thoughts— or even resorted to crude rejection of all method” (SL §62, my emphasis) See also, e.g., (PhG §48; SL §60; EL §117, §231).

²⁹⁷ As a system, philosophy “has to complete itself in a purely continuous course in which nothing extraneous is introduced” (SL §63).

object to be defined is, that is, the more numerous are the aspects which it offers to our notice, the more various are the definitions we may frame of it. Thus there are quite a host of definitions of life, of the state, etc”.²⁹⁸ The correctness of the definition is often unconsciously taken to lie in its correspondence with current beliefs and prevailing ideologies. It is now clear why Hegel thinks this method is inadequate. Its inadequacy lies in the fact that it inevitably introduces subjectivity and arbitrariness. Moreover, this method, in Hegel’s view, is unable to capture the essential nature of anything that is self-producing and self-organizing in either natural or spiritual life.²⁹⁹

Synthesis takes the results of analysis – the definitions analysis produces – as its own fixed and certain starting point. But, Hegel notes, these definitions do not contain anything that shows that and why these definitions *necessarily* apply to actual objects.

²⁹⁸ (EL §229).

²⁹⁹ Hegel claims that the presence of living nature and of artistic beauty leads to “the obligation, according to the Kantian presentation itself [in the Critique of Judgment], not to restrict the cognition of the products of nature to the categories of quality, cause and effect, composition, constituents, etc.” (EL §58) In other words, Hegel claims that there is an obligation to recognize inner purposiveness as at least having the same constitutive status as the categories of the understanding – it is inconsistent, on Kant’s part, to claim that we can have knowledge only of appearances and at the same time maintain that we can know the true nature of thought as it is in itself and to restrict this knowledge by fiat, as it were, to the finite forms of the understanding derived from presupposed traditional logic. The obligation not to restrict cognition, at least of living nature, to these forms arises precisely from the need to remove this “supreme inconsistency”. It is the obligation to abandon the claim that we simply cannot know organized living beings as such (since we cannot know them through the categories of the understanding, and the concept of inner purposiveness serves as a merely regulative principle of judgment and does not constitute knowledge either): “The pigeon-holing process of understanding **retains for itself the necessity and the notion controlling the content**, that which constitutes the concrete element, **the actuality and living process of the subject-matter** which it **labels**: or rather, understanding does not retain this for itself, on the contrary, understanding **fails to know it**. It is not even aware of **the need for such insight**; if it were, it would drop its schematizing process, or at least would no longer be satisfied to know by way of a mere table of contents. A table of contents is all that understanding gives, the content itself it does not furnish at all. If the specific determination (say even one like magnetism) is one that in itself is concrete or actual, it all the same gets degraded into something lifeless and inert, since it is merely predicated of another existing entity, and **not known as an immanent living principle of this existence**; nor is there any comprehension of how in this entity its intrinsic and peculiar way of expressing and producing itself takes effect. This, the very kernel of the matter, formal understanding leaves to others to add later on. Instead of making its way into the inherent content of the matter in hand, understanding always takes a survey of the whole, assumes a position above the particular existence about which it is speaking, i.e. it does not see it at all.” (PhG §53).

This necessity is supposed to be demonstrated through the synthetic procedure itself. But, Hegel argues, since analysis disregarded the inner relationships and transitions that belong to the *naturgemäße Darschtellung* of its object (the presentation according to its nature), the synthetic procedure has only subjective insight to rely on in putting together what analysis separated (e.g. intuitions and concepts, empirical and pure interests, etc.). Thus, synthesis is able to demonstrate only the necessity that characterizes the way our reason *conceives* of the object, and not the inner necessity of the object itself. In other words, this kind of synthesis can give us only subjective certainty, not the truth. For this reason, Hegel claims, “the synthetic method of cognition is just as unsuitable for philosophy as the analytical: for philosophy has above all things to leave no doubt of the necessity of its objects”.³⁰⁰

3.2

Hegel’s criticism of analytic and synthetic methods does not imply that he wants to reject the use of analysis and synthesis in philosophy altogether. Clearly, analysis and synthesis figure in Hegel’s own dialectical procedure, but in a way that both interweaves analytic and synthetic steps and, more importantly, makes the whole dialectic *both analytic and synthetic*. For example, the *Phenomenology* may be said to proceed analytically insofar as it follows (simply looks on)³⁰¹ the self-development of consciousness through the internal, or immanent, *critique* of its various shapes. This is a negative process of analysis or resolution, as it were, with respect to various finite conceptions of thought – “the path of despair”, as Hegel calls it. At the same time, the

³⁰⁰ (EL §229).

³⁰¹ (PhG §85).

Phenomenology may be said to proceed synthetically, insofar as each stage preserves and completes the insights of the previous stages, and insofar as this very path also generates, and elevates us to the standpoint of absolute knowing – of philosophy as pure rational science that itself makes its object fully actual.

Recall Goethe's claim that unlike the received method of the sciences, his "objective thinking" serves as a mediator between the subject and the object and, as such, is simultaneously analytic and synthetic. This feature of objective thinking becomes even more important for Hegel's conception of the true method of philosophy as *self-examination* of essentially self-relating, self-determining thought:

"The philosophical method is analytical as well as synthetic, not indeed in the sense of a bare juxtaposition or mere alternating employment of these two methods of finite cognition, but rather in such a way that it holds them merged in itself. In every one of its movements therefore it displays an attitude at once analytical and synthetic. Philosophical thinking proceeds analytically, in so far as it simply takes up its object, *the Idea*, and lets it go its own way, while it simply watches the movement and development of it, so to speak. To this extent philosophizing is wholly passive. But philosophical thinking is equally synthetic as well, and it proves itself to be the activity of the Concept itself." (EL §238, my emphasis)

However difficult it may be fully and precisely to specify this method, Hegel insists that it is the only method adequate to the nature of philosophical science. If philosophical science is conceived as the Aristotelian "thinking that is thinking of thinking," then the way philosophical investigation proceeds must be identical with the method (or logic) of development and activity of thinking itself. That is, its method must be Hegel's dialectic. In the *Science of Logic*, he makes this point emphatically:

"I could not pretend that the method which I follow in this system of logic – or rather which this system in its own self follows – is not capable of greater completeness, of much elaboration in detail; but at the same time I know that **it is the only true method. This is self-evident simply from the fact that it is not something distinct from its object and content;** for it is the inwardness of the

content, the dialectic which it possesses within itself, which is the mainspring of its advance. It is clear that **no expositions can be accepted as scientifically valid which do not pursue the course of this method** and do not conform to its simple rhythm, for **this is the course of the subject matter itself.**" (SL §63, pp.53-54, my emphasis)

3.3

One of the results of the *Phenomenology*, which Hegel discusses again in the Introduction to the *Philosophy of Right*, is that will and intelligence should not be understood as two separate faculties. Rather, the will is a practical mode of thought. It is "a particular way of thinking – thinking translating itself into existence, thinking as the drive to give itself existence".³⁰² The distinction between theoretical thought and will, Hegel argues, is simply a distinction in attitude towards its object. It is, roughly, the distinction in the direction of fit. In the theoretical attitude, the thinking subject overcomes the opposition between thought and the object of thought by comprehending the object, by recognizing thought in the object. In the practical attitude, this opposition is overcome through the subject's self-determination to action, for the subject identifies with the deeds and ends she brings about as something that *she* has *done* or *made*. As Hegel puts it, "they bear the imprint of [her] mind." Moreover, the theoretical and the practical attitudes, thought and will, are mutually dependent. On the one hand, Hegel argues, the theoretical is essentially contained within the practical – one cannot will without theoretical understanding of what one aims to accomplish, for example. On the other, it is impossible to think without a will. Theoretical thought seeks knowledge – it is itself intentional, something the mind *does*. We may also say that theoretical judgments are *commitments* to what is true and to what other judgments can or cannot be true.

³⁰² (PhR §4A).

“These distinct attitudes,” Hegel concludes, “are therefore inseparable: they are one and the same thing, and both moments can be found in every activity, of thinking and willing alike.”³⁰³ Given this conception of the relationship between thought and will, it is important that we understand Hegel’s practical philosophy in light of his conception of the nature of thought and of philosophy as its pure rational science.

In the next chapter, I will consider the way in which the structural analogy between Goethe’s methodology of “objective thinking” and Hegel’s conception of philosophical science and its method bears on Hegel’s philosophical science of right and on his critique of Kant’s moral philosophy, in particular.

³⁰³ (PhR §4A).

Chapter 5

Hegel's Philosophical Science of Right, its Method, and its Plausibility

In chapter 2, I gave an account of Kant's method in moral philosophy as "broadly Newtonian". I now turn to Hegel's conception of a philosophical science of right and its method. This conception, I will argue, has the key features of Goethe's model of science. That is, Hegel's approach in the *Philosophy of Right* can be plausibly characterized as "broadly Goethean" *objective thinking* about freedom. Considering Hegel's theory in this light brings to the fore the crucial connection between his critique of Kant's moral philosophy and his rejection of Kant's critical method, and is fruitful for judging the independent plausibility of Hegel's positive account of ethics.

I proceed as follows. After drawing attention to the Goethean features of Hegel's approach and to the methodological bases of his critique of opposing views, I offer some reasons that weigh against Hegel's conception of the philosophical science of right as a viable alternative to Kant's moral theory. On the one hand, we may doubt that Hegel's ethical theory achieves the organic systematicity and inner necessity his conception of philosophical science demands. On the other hand, any attempt to achieve rigorous scientificity makes it impossible for Hegel's ethical theory (or any Hegelian theory of the kind he envisions) to fulfill its "supreme and ultimate purpose" as philosophy of reconciliation – to demonstrate that our social world contains all the essential elements that express our nature as free rational beings and that it is a world in which our freedom can *in fact* be *completely* realized. If successful, the argument of this chapter raises more fundamental doubts about the plausibility of Hegel's conception of philosophy as the

philosophical science of *the Idea* that extends Goethean “objective thinking” beyond its original empirical domain to reason itself.

If, as I try to show, methodological differences are central to Hegel’s critique of Kant’s moral philosophy, the same considerations that lead us to doubt the plausibility of Hegel’s approach also challenge the plausibility of some key aspects of this critique. In my view, these reflections support a new perspective on Kant’s conception of moral objectivity suggested by the discussion of Kant’s methodological Newtonianism. On this view, to be defended in the next chapter, the objectivity of the content of our practical thought develops as the background conditions of moral deliberation become progressively more inter-subjectively justifiable.

1. Hegel’s philosophical science of right and Goethean “objective thinking”

1.1

While it is possible to appreciate some of the insights of Hegel’s practical thought by considering it as standing on its own³⁰⁴, many aspects of his positive system of ethics and his criticism of competing theories cannot be fully understood outside of the larger context of his conception of philosophical science and its logic. Indeed, his polemic against opposing views is often centered on the claim that they lack the proper philosophical *form* and, thus, fall short of the “scientific and objective treatment” of the subject matter. At the same time, Hegel repeatedly draws his readers’ attention to the fact that the philosophy of right proceeds according to the *method* or *form* of inquiry

³⁰⁴ See, for example, John Rawls, *Lectures on the History of Moral Philosophy*, p.330. Similarly, Frederick Neuhouser remarks that “even though Hegel’s social theory is undeniably embedded within a more comprehensive philosophical vision – one that includes views about the nature of ultimate reality and the meaning of human history – it is possible, to a surprisingly large extent, to understand his account of what makes the rational social order rational and to appreciate its force even while abstracting from those more fundamental doctrines.” (*Foundations of Hegel’s Social Theory*, p.4)

elaborated in *Logic* and insists that it should be understood and judged from this point of view.³⁰⁵ The *Philosophy of Right*, he stresses, “deals with science, and in science, the *content* is essentially inseparable from the *form*”.³⁰⁶ It, therefore, *presupposes* “a familiarity with the nature of scientific procedure in philosophy, as expounded in philosophical logic”.³⁰⁷

We have seen that Hegel offers the *Phenomenology of Spirit* as the “proof” or “deduction” of his conception of philosophy as a self-justifying circle, in which thought becomes fully self-conscious as both mind and the world. At the same time, the *Phenomenology* serves as a “deduction” of Hegel’s conception of the objectivity of thought – one he contrasts with Kant’s notion of objectivity that is “only subjective in its form”, since Kant’s universal and necessary determinations of thought, according to Hegel, are “still *only our* thoughts, and are cut off from what the thing is *in-itself* by an impassible gulf”. The *Phenomenology* aims to demonstrate that “**the true objectivity of thinking** consists in this: that **thoughts are not merely our thoughts, but at the same time the In-itself of things** and of whatever else is objective”.³⁰⁸

³⁰⁵ In the Preface to the *Philosophy of Right*, Hegel makes it clear that he intends this work to be understood as grounded on the method expounded in his logic: “Since I have fully developed the nature of speculative knowledge in my *Science of Logic*, I have only occasionally added an explanatory comment on procedure and method in the present outline. Given that the subject-matter is concrete and inherently of so varied a nature, I have of course **omitted to demonstrate and bring out the logical progression in each and every detail**. But, on the one hand, it might have been considered superfluous to do so in view of the fact that I have presupposed a familiarity with scientific method; and on the other, it will readily be noticed that the work as a whole, like the construction [*Ausbildung*] of its parts, is **based on the logical spirit**. It is also chiefly **from this point of view that I would want this treatise to be understood and judged**.” (PhR, Preface, p10, my emphasis). See also “The method whereby, the concept, in science, develops out of itself is merely an immanent progression and production of its own determinations is likewise assumed to be familiar from logic.” (PhR §31)

³⁰⁶ (PhR p.10, my emphasis).

³⁰⁷ (PhR §2A).

³⁰⁸ (EL §41A2, my emphasis).

On this conception of philosophy, worked out in detail in Hegel’s “logical” treatises, each part or aspect of philosophical science – philosophy of Nature, philosophy of Spirit (of which his philosophical science of right is a part), etc. – is itself a circle that fully embodies and expresses *the Idea* of self-reflecting, self-determining thought in a particular domain. In each of these parts, says Hegel, “the philosophical Idea is found in a particular specificity or medium”.³⁰⁹ The *Philosophy of Right* is concerned with the actuality of the *Idea* as practical thought. That is, it seeks philosophical knowledge of the will as the practical mode of thinking – as “thinking translating itself into existence, thinking as the drive to give itself existence”.³¹⁰

As part of the system of philosophy, the *Philosophy of Right* takes as given the results of the philosophical investigation that preceded it. Its key premise is the concept of the will, with freedom as its essence and its aim. Hegel provides the “deduction” of this concept, together with the justification of the *concept of right* as the “body of all conditions of freedom”³¹¹, in the *Encyclopedia of the Philosophical Sciences*. This “deduction” is a dialectical argument that claims to follow the self-development of thought through all its moments and transitions towards its necessary determination *as* a free will. According to Hegel, it demonstrates that the free will is a necessary aspect of the activity of reason and, “as the practical mind in general, is the most direct truth of intelligence”.³¹² However, this “deduction” does not on its own provide a complete proof that the will is free; nor does it fully specify and establish the nature of the will or of

³⁰⁹ (EL §15).

³¹⁰ (PhR §4A).

³¹¹ (EG §486); see also (§§485-487; 488-552).

³¹² (PhR §4R).

freedom. Such a proof and specification is the central task of the *Philosophy of Right*. The concept of the will, and the related *concept of right*, is its point of departure.

In the opening paragraph of the Introduction to the *Philosophy of Right*, Hegel once again contrasts the proper subject-matter of philosophy – *Ideas* – with “mere concepts” or “abstract categories of the understanding”. The subject matter of the philosophical science of right, he declares, is the *Idea of right* – it “is freedom, which, in order to be truly apprehended, must be known both in its concept and in the embodiment of that concept [*Dasein*].”³¹³ Hegel’s *Idea of right* is free will that is, and knows itself to be, fully *actual*. Its end is its own *self-sufficient* activity as life within a system of fully reasonable and inter-subjectively justifiable social and political institutions and practices. This is why Hegel describes it as externally unrestricted, or infinite, and as making its own reality and, therefore, its own *truth*. It is “truly infinite”, he writes,

“because its object being the will itself, is for it not another or a barrier... Moreover, it is not mere possibility, capacity, potentiality, but infinitely actual, because the reality of the concept or its visible externality is internal to itself.” (PhR §22)

“The **will is true**, or rather **truth itself**, because its self-determination consists in its being in its manifested reality...what it is in its concept. In other words, **the pure concept of the will has the intuition of itself as its end and reality.**”(PhR §23, my emphasis)

For Hegel, this is “*the truth*” that practical philosophy aims to comprehend. The *Philosophy of Right*, he tells us, follows the development of the *concept of right* into the *Idea of right* – “the *concept of right* together with the *actualization* of that concept”,³¹⁴

³¹³ (PhR §1; §1A).

³¹⁴ (PhR §1, my emphasis).

“the concept and its existence, separate and united, like soul and body”.³¹⁵ That is, the task of the philosophical science of right is to trace and comprehend the inner necessity with which the concept of right is gradually specified and articulated into the system of ethical norms and social structures in which these norms are realized. It is to demonstrate that the *concept* of right “has actuality, and further that it gives this actuality to itself”³¹⁶ and to make explicit and allow us to comprehend what the will is “implicitly”.³¹⁷

Importantly, this aim of the *Philosophy of Right* fits with, and contributes to, the aim of philosophy in general. We have seen that, on Hegel’s conception, philosophy plays a central role in the actualization of self-conscious reason. “The highest and final aim” of philosophical science, he writes in the *Encyclopedia Logic*, is to bring about “a **reconciliation** of the self-conscious reason with the reason which is in the world – in other words, with actuality”.³¹⁸ The philosophical science of right has the same “highest and final” aim with respect to the practical mode of thought. Hegel envisions this science as itself integral to the actualization of freedom in bringing to consciousness the *essential* rationality of the system of basic institutions of a developed modern society – in explaining “*what* the particular right determinations are”³¹⁹ and *why*. A human being, he argues, “must encounter his own reason”³²⁰ in the system of right in order not to experience his social world as an external constraint; that is, in order to be fully free.

³¹⁵ (PhR §1AH).

³¹⁶ (PhR §1).

³¹⁷ (PhR §27).

³¹⁸ (EL §6, my emphasis).

³¹⁹ (PhR §2A).

³²⁰ (PhR p.14fn).

Thus, the philosophical science of right that makes explicit to those who “have received an inner call to comprehend”³²¹ the rational essence of the practical life of their social world, enables them to reconcile with their society, to identify with its norms. In recognizing these norms as their own, individuals can be and see themselves as genuinely free – their wills determined and bound by their own reason.³²²

1.2

Now, consider how the approach Hegel takes in the *Philosophy of Right* (both in its critical and its constructive aspect) reflects the general (‘Goethean’) methodological considerations stressed in the *Phenomenology* and his works on logic. Let me first briefly restate these considerations, as discussed in the previous chapter. Given Hegel’s conception of the object of philosophical knowledge – activity of thought that is essentially unrestricted – a proper philosophical investigation must itself be an externally unrestricted “infinite thinking of reason” with two closely related characteristics:

- (i) It must be *free* thinking that **rejects fixed external presuppositions** or assumptions.
- (ii) It must be *immanent* thinking *with* the object **rather than external reflection** on it. That is, philosophical investigation capable of knowing thought in its truth must be “objective thinking” that follows its object through *the complete circle* of

³²¹ (PhR p.22).

³²² In other words, the philosophical science of right is supposed to help individuals see their modern social world not as an external constraint on their freedom, but as essentially enabling its realization and as itself the way their freedom is realized. This is what Hegel calls ‘being with oneself in another’.

its manifestations or shapes. We can comprehend the nature of thought only by grasping the inner necessity of transitions between these manifestations.³²³

As we shall now see, Hegel emphasizes the very same features in his discussion of the properly scientific form and method of the philosophical science of right.

In the prefatory remarks to the *Philosophy of Right*, Hegel declares that a genuinely philosophical investigation of Right does not consist in external reflections on its object or content; rather, “if the content is to be discussed philosophically, it will bear only *scientific* and *objective* treatment”.³²⁴ He outlines the nature of this objective treatment in the Introduction that follows, and appeals to its key features at various points throughout the book. The following two methodological requirements are central to Hegel’s project:

- (i) The philosophical inquiry into right must be thinking **free from fixed external presuppositions**.

While the *Philosophy of Right* does presuppose the results of logic, these results are what Hegel calls “*internal presuppositions*”³²⁵ of his philosophical science. They are proved at the earlier stages of philosophical investigation leading to the *Idea* of right. In other words, they are internal to Hegel’s philosophical system in the way that, for example, the results of Kant’s theoretical critique – limiting the real use of the categories to objects given in sensible intuition, the logical possibility of the idea of freedom, etc. – are internal to Kant’s critical philosophy and are presupposed by his science of morals.

³²³ “Philosophy... is the process that creates its own moments in its course, and goes through them all; and **the whole of this movement constitutes its positive content and its truth.**” (PhG §47)

³²⁴ (PhR, p.22, my emphasis).

³²⁵ (PhR §32).

In the previous chapter, we have considered some general reasons for Hegel's rejection of the method of "mere understanding" that relies on the *presupposed* "divorce between concept and reality".³²⁶ In the *Philosophy of Right*, he associates this "divorce" with much of the practical philosophy of the Enlightenment, and, in particular, with the practical thought of Rousseau and Kant. According to Hegel, in Kant's practical philosophy, in particular, the "divorce between concept and reality" takes the form of a strict separation between pure aspects of the will (conceived, moreover, as an individual faculty or capacity, and, therefore, as essentially limited from the start) and externally given material to which it is applied. In other words, Kant's theory separates the spontaneous and the receptive elements of our practical thought, opposing the will's pure rational form to human beings' phenomenal nature and to the phenomenal nature of their social life. As Hegel sees it, this view *presupposes* that a pure rational form of the will can be isolated from the will's phenomenal aspects by analysis. Kant's separation of *Wille* (as pure practical reason) and *Willkür* (as sensibly-affected power of choice) is, in Hegel's view, a clear manifestation of this analytical (and artificial) dissection. The problem is that this approach leads to a view that takes our sensible nature and social life to be given material that is not *in itself* rational. As a result, practical laws are conceived as rational constraints on the sensibly-conditioned power of choice, which may or may not choose to act in accord with the demands of pure practical reason. Indeed, Kant often describes our sensibly-conditioned power of choice as resisting the moral law.³²⁷ Kantian laws of practical reason, Hegel argues, specify what a particular will (and a shared social

³²⁶ (EL §55).

³²⁷ See e.g., (KpV 5:32,79,92, 147).

world) *ought to* be in order to be moral, but can never actually *fully* be (or *know* itself to be).³²⁸ The objectivity of these laws is, to use Hegel’s language, “only *subjective in its form*, because, according to Kant, thoughts, although they are universal and necessary determinations, are still *only our thoughts*” and are separated from how things are in reality by “an impassible gulf”.³²⁹ These laws are conceived as *objectively real* only as rational constraints on the power of choice, not as actual deeds or principles governing existing social institutions.

Hegel makes the same point in terms of the idea of freedom. Kant’s presupposed “divorce between concept and reality”, he notes, implies a conception of freedom as *essentially* only a *capacity*, or the will’s “*predisposition towards freedom*”³³⁰:

“The Understanding adheres to the **purely implicit** character of a thing, and in accordance with this position **calls freedom a capacity**, since it is at this point only a possibility. But the Understanding **regards this phase as absolute and perennial**, and considers the relation of the will to what it wills, or in general to the object in which it is realized, as **merely a matter of its application to a given material**, which does not belong to the essence of freedom itself. In this way the understanding occupies itself with **mere abstractions**, and **not with the Idea and truth**.” (PhR §10, my emphasis)

³²⁸ This point recalls Kant’s remark in *Religion* on “the deficiency which is in principle inseparable from the existence of a temporal being, [namely] never to be able to become quite fully what he has in mind.” (Rel 6:67fn)

³²⁹ (EL §41A2).

³³⁰ (PhR §22). In the *Encyclopedia Logic*, Hegel explains his Aristotelian conception of *actuality* by contrasting it to the notion of mere *existence*. This contrast, he suggests, brings out the main reason behind Aristotle’s polemic against Plato. This contrast is mirrored in Hegel’s own polemic against Kant’s conception of freedom, and his conception of ideas of reason in general: “[Aristotle’s] actuality is that of the Idea itself, and not the ordinary actuality of what is immediately present... Aristotle’s polemic against Plato consists in his designation of the Platonic Idea as mere *dynamis* [potentiality], and in urging, on the contrary, that the Idea, which is recognized by both of them equally to be what is alone true, should be regarded as *energeia* [actuality], i.e., as the inner that is completely outer, so that the unity of inner and outer. In other words, the Idea should be regarded as actuality in the emphatic sense that we have given to it here.” (EL§142A)

The problem Hegel finds with this conception is that it thinks of freedom in an inconsistent way that makes its form incompatible with its content. On the one hand, freedom is conceived as “*free reflection*” – its *form* is self-determination. On the other hand, it is conceived as independence from our sensible nature – “free reflection that *abstracts from everything*”. That is, the *content* to which the will is applied in determining itself – drives, desires, and inclinations, particular ends – is viewed as given by nature (of our sensibility or of our social life) and as essentially distinct from freedom. The mere *form* of the will in its freedom (as self-determination) is *infinite*, but its *content* is *finite*. The will, conceived this way, is not *actually* free, not fully self-determining. Rather, it is *dependent* on, and *limited* by, its content.

The actual realization of this will’s capacity for freedom in actions and in principles that govern social institutions is a contingent matter – a matter of the goodness of individual character or of collective choice. Moreover, whether this capacity is actually realized in any given case we can never *know*; we can only *believe* that it is. The philosophy that defines freedom this way, Hegel argues, can claim only *subjective certainty* of freedom’s actuality, not *truth* (that is, the unity of concept and its existence). He writes:

“Reflection, the formal universality and unity of self-consciousness, is the will’s *abstract* certainty of its freedom, but it is **not yet the truth of this freedom**, because it does not yet have itself as its content and end, so that **the subjective side is still something other than the objective...**[T]he *content*, which, as something *encountered*, is not contained in that certainty and therefore *comes to it from outside* – although ‘outside’ here denotes drive or representation, or simply the fact that the consciousness is filled in such a way that **its content is not derived from its own self-determining activity as such...In all reflective philosophy, as in that of Kant...freedom is nothing than this formal self-activity.**”(PhR §15, my bold)

“[I]f we bear firmly in mind that the content of what [the human being] wills is a given one, it follows that he is determined by it and is **in this very respect no longer free.**”(PhR §15AH, my bold)

Given this conception of freedom, freedom’s *complete* actualization (in the form of a completely moral disposition or a realized ethical community, for example) can only be thought in terms of continuous *approximation*. It is something that, in principle, only *ought to be* – an ideal at which we ought to aim, but which we can never *actually* completely bring about. For Hegel, philosophy cannot be content with this conception, since this makes freedom’s activity into something *subjective* and our cognition of freedom’s *actuality* into a mere postulate, an article of faith, rather than knowledge.^{331 332}

The limitations that “reflective philosophy” *imposes* on its concept of the will – limitations, which “lie solely in the difference between the concept and its object or content”³³³ – preclude the possibility of genuine *knowledge* of the nature of the will. A human being who is *truly free* does not see his sensible nature and the nature of his social world as “other or as a limitation”³³⁴, but as something in which he recognizes the activity of his will, something with which he is able to identify. “*The will in its truth*”,

³³¹ See, e.g. (PhR, Preface, p.22).

³³² Hegel describes the “subjectivist” approaches of his predecessors as follows: “The procedure was to presuppose the representation [*Vorstellung*] of the will and to attempt to establish a definition of the will by deriving it from that representation; then the so-called “proof” of the will’s freedom was derived, in the manner of the old empirical psychology, from the various feelings and phenomena of ordinary consciousness, such as remorse, guilt and the like, by maintaining that they can be explained only in the light of the will that is free. But, it is more convenient of course to arrive at the same point by taking the short cut of supposing that freedom is given as a ‘fact of consciousness’ and that we must simply believe in it!” (PhR §4)

³³³ (PhR §24).

³³⁴ (PhR §22).

Hegel stresses, “is such that what it wills, i.e. its content, is identical with the will itself, so that *freedom is willed by freedom*”.³³⁵

In sum, on Hegel’s view, the approach Kant adopts (his presupposed “divorce between concept and reality”) precludes from the start the possibility of *knowledge* of freedom as *actual* both in individuals’ sensible natures and in the institutions of their social world. Consequently, it precludes the very possibility of practical philosophy as *science*. The philosophical science of right, as does philosophy in general, Hegel insists, requires giving up the presupposition that rationality is essentially subjective (that it belongs *merely* to our thought and *not also* to its content and to existing social structures).

This brings me to the second “Goethean” requirement of Hegel’s “scientific procedure” in the *Philosophy of Right*.

(ii) A philosophical inquiry into right must develop the system of right by following the *immanent* logical development of the concept of right (or the will).

According to Hegel, the *Philosophy of Right* articulates the system of institutions and associated rights by following the self-development of practical thought, or the will. It claims to think “objectively” – to think *with* its object, observing and comprehending the system of rights generated internally as the *concept of right* goes through its logical stages and necessary transitions in order to become fully actual in the world. Hegel describes the method of his philosophical science of right this way:

“The science of right is a *part of philosophy*. It has therefore to develop the *Idea*, which is the reason within an object, out of the concept; or what comes to the same thing, it **must observe the proper immanent development of the thing itself.**” (PhR §2, my emphasis)

³³⁵ (PhR §21AH, my emphasis).

Hegel's comparisons of his own method with other approaches turn on the claim that only this kind of "immanent" thinking is adequate for the aim of philosophy, which is genuine knowledge, or the *truth*, of its object. Consider, for example, the contrast he draws between his own immanent "*scientific procedure in philosophy*" and "the abstract, non-philosophical, method of the sciences." The latter, he notes, is the formal method of cognition based on definitions, inferences, deductive proofs, and the like. On this approach (characteristic of various legal doctrines, including classical Roman Jurisprudence), "the first thing sought and demanded is the definition...for the sake of preserving *the external form of scientific procedure*".³³⁶ Theories of this kind tend to deduce their definitions by conceptual analysis or abstraction from particular cases, attempting to extract the common elements in human beings' judgments and feelings about rights. Hence, the correctness of these definitions is made dependent on their agreement with prevailing ideas. They are essentially *subjective*, even if, in some cases, they happen to represent some important aspect of the concept of right – for example, certain elements of family law may reflect an aspect of the concept of right, but in a limited form, without recognition of the necessary rational connection between these elements and universal rights of the state. Theories that follow this "non-philosophic" method, Hegel argues, are, therefore, unable to capture the inner necessity and the universal character of right. In addition, they misunderstand the nature of the properly philosophical *concept* of right and the kind of "immanent" justification this concept and its determinations require:

"This method leaves out of account what is alone essential to science – **with regard to content**, the *necessity of the thing* in and for itself (right, in this

³³⁶ (PhR §2, my emphasis).

instance), and **with regard to form**, the *nature of the concept*. In philosophical cognition, on the other hand, **the chief concern is the necessity of a concept, and the route by which it has become a result is its proof and deduction.**" (PhR §2A, my emphasis)

Even more problematic, for Hegel, is the supposition that the Idea of right can be cognized immediately and asserted as a 'fact of consciousness'. In theories that proceed this way – here Hegel seems to have in mind the 'Kantian' philosophies of Fichte and Fries, and, perhaps, Kant's own appeal to the 'fact of reason' – "the mode of immediate consciousness and feeling makes the subjectivity, contingency, and arbitrariness of knowledge into its principle".³³⁷ Since this manner of cognition does not even attempt a logical proof of its idea of right, it is even further removed than the formal 'method of the sciences' from objective, genuinely philosophical theory of right.

In his emphasis on *development* as central to the kind of justification philosophical concepts require, Hegel also wants to draw a clear distinction between the "immanent" or "logical" development of the system of right and what he calls "historical explanation and justification".³³⁸ The "historical view"³³⁹ is similarly concerned with the *development* of social institutions and associated legal and moral norms. It is valuable insofar as it understands its task to be merely historical. But, it goes wrong when it confuses the *historical* development of rights and institutions (and explanations in terms of historical conditions, circumstances, and needs that led to their emergence) with *conceptual development* that alone can provide genuinely rational and objective justification and explanation. Hegel points out that this "historical justification" substitutes knowledge of

³³⁷ (PhR §2A).

³³⁸ (PhR §3).

³³⁹ Hegel's primary targets here are Friedrich Karl von Savigny and Gustav Ritter von Hugo – both German legal scholars and members of the historical school of law.

the *necessity* of determinations of right *immanent* in the concept of right for *external* and inessential factors, as when it tries to justify monasteries, for example, “by an appeal to their services in cultivating and populating the areas of wilderness and in preserving scholarship through instruction, copying of manuscripts etc., and [regards] these services as the *reason* and *purpose* of their continued existence.”³⁴⁰ To justify institutions and norms by appealing to considerations relative to a particular historical time and place is to deduce them from given facts that may have no value or justification of their own. Moreover, this kind of “historical justification” of social institutions and rights makes these institutions and rights obsolete and meaningless as soon original circumstances are no longer present. This puts “the relative...in place of the absolute”³⁴¹ and “*external* appearance in place of the *nature of the thing itself*”.³⁴²

According to Hegel, the “immanent”, objective character of the scientific procedure in philosophy is alone able to produce genuine knowledge about the nature of the will and of freedom. This feature of the properly philosophical method is also at the center of Hegel’s critique of Kant’s moral theory in the *Philosophy of Right*. Before I consider this critique, however, I need to say a bit more about the structure of Hegel’s ethical theory and to show more concretely how Hegel’s scientific procedure, his “objective thinking”, is put to work in the *Philosophy of Right*.

1.3

Hegel’s description of the properly scientific method at this point sounds familiar:

³⁴⁰ (PhR §3A).

³⁴¹ (PhR §3R).

³⁴² (PhR §3A my emphasis).

“[T]his dialectic is not an activity of **subjective thinking applied to some matter externally**, but is rather **the matter’s very soul** which unfolds its branches and fruit **organically**. This development of the Idea is the proper activity of its rationality, and thinking, as something subjective, **merely looks on at it** without for its part adding to it any ingredient of its own. To consider anything rationally is not to bring reason to bear on the object from the outside, and so to temper with it, but to find that the object is rational on its own account; here it is **mind in its freedom**, the culmination of self-conscious reason, which **gives itself actuality, and produces itself as the existing world**. The task of philosophic science is simply **to bring into consciousness this proper work of the reason in the thing itself.**” (PhR §31A, my emphasis)

The *Philosophy of Right* aims to prove that social and political institutions and practices of modern developed societies can in fact be brought into a system of right that fully realizes freedom, even if particular states and institutions we encounter are in various ways deficient. Indeed, the *Philosophy of Right* as a whole is supposed to be this proof; it is supposed to make the inner rationality of our social world explicit to us, “so that the content that is rational in itself may also gain a rational form and thereby appear justified to free thinking”.³⁴³ By recognizing that our shared social world contains all the essential institutional elements and principles that express our nature as free beings, we are supposed to be able to reconcile ourselves with it – to see it not as constraining our freedom, but as containing all the preconditions for its complete realization. This does not mean that our political and social institutions in their present shape do not need improvement or that *all* of them are essentially rational. Hegel’s distinction between *actuality* (as a kind of Aristotelian activity) and mere *existence* is crucially important here. Existence, Hegel stresses, is “in part mere appearance, and only in part actuality”.³⁴⁴

³⁴³ (PhR Preface, ¶6).

³⁴⁴ (EL §6) In the *Encyclopedia Logic*, Hegel compares *actuality* as he understands it, particularly with respect to practical thought, with theories of the “analytic understanding”: “[T]he notion that ideas and ideals are something far too excellent to have actuality, or equally something too impotent to achieve actuality is opposed to [*the actuality of what is rational*] as well. However, the severing of the actuality from the Idea is particularly dear to the understanding, which regards its dreams (i.e., its abstractions) as

Indeed, there are clear examples of things that exist but are not, in the relevant sense, actual – a dead body exists, but has no actuality, or an institution of slavery that may still be practiced in some places, but does not, in any way, express the actuality of right. What the philosophical science of right aim to help us see, in Hegel’s view, is that in living our lives and in seeking to improve our social world, our task is not to construct its basic structures completely anew according to some imagined ideal, but to comprehend and to perfect what, in essence, is already there.³⁴⁵ Moreover, specific institutional defects can only be properly understood in light of the knowledge of the *Idea of right* as a whole.³⁴⁶

2. The development of the Idea of right and the system of Ethical Life.

2.1

something genuine, and is puffed up about the “ought” that it likes to prescribe, especially in the political field – as if the world had had to wait for it, in order to learn how it ought to be, but is not. ... When the understanding turns against trivial, external, and perishable objects, institutions, situations, etc., with its “ought” – objects that may have a great relative importance for a certain time, and for particular circles – it may very well be in the right; and in such cases it may find much that does not correspond to correct universal determinations. Who is not smart enough to be able to see around him quite a lot that is not, in fact, how it ought to be? But this smartness is wrong when it has the illusion that, in its dealing with objects of this kind and with their “ought,” it is operating within the [true] concerns of philosophical science. The science deals only with the Idea – which not so impotent that it merely ought to be, and is not actual...”(EL §6).

³⁴⁵ “When thinking of the idea of the state”, Hegel writes, “we must not have in our mind any particular state, or particular institution, but must rather contemplate the idea...by itself. Although a state may be declared to violate right principles and to be defective in various ways, it always contains the essential moments of its existence, if, that is to say, it belongs to the fully formed states of our own time. But as it is easier to detect short-comings than to grasp the positive meaning, one easily falls into the mistake of dwelling so much upon special aspects of the state as to overlook its inner organic being. The state is not a work of art. It is in the world, in the sphere of caprice, accident, and error. Evil behavior can doubtless disfigure it in many ways, but the ugliest man, the criminal, the invalid, the cripple, are living men. The positive thing, the life, is present in spite of defects, and it is with this affirmative that is our theme here.” (PhR §258A)

³⁴⁶ See, for example, (EL §60, p.106).

To see how Hegel's methodological views are actually put to work, consider the structure of the *Philosophy of Right*. It proceeds through three major stages or "moments" in the development of the concept of right – Abstract Right, Morality, and Ethical Life.

Hegel begins with Abstract Right, which is, essentially, a system of merely private right concerned with *personal freedom* – an individual's freedom to pursue her private (largely economic) interests. It considers individuals as bearers of rights against each other – primarily rights to physical integrity, property, and contractual exchange. It also develops a conception of crime as a violation of rights and that of punishment as a necessary retributive response. Yet, the system of Abstract Right is unable to ensure that the rights it specifies (and personal freedom with which it is concerned) can actually be consistently and fully realized. This system contains a number of internal limitations that necessitate a transition to a higher stage in the will's development. The three most important problems Hegel discusses are these. First, in the system of Abstract Right, it is a contingent matter whether a person's actions actually conform to right. This conformity may easily come into conflict with personal interests and arbitrary choice, resulting in breaking a contractual agreement, for example, or taking someone else's property.³⁴⁷ Second, Abstract Right lacks internal resources authoritatively and independently to adjudicate cases of "collisions of rights" – situations in which different persons have competing right claims to the same piece of property, for example.³⁴⁸ Finally, the system

³⁴⁷ This problem is similar to what Kant, in the *Doctrine of Right*, calls the problem of assurance". Kant describes it this way: "I am...not under an obligation to leave objects belonging to others untouched unless everyone provides me with an assurance that we will behave in accordance with *the same principle* with regard to what is mine." (MdS 6:255) For Kant, solving the problem of assurance requires establishment of an executive branch of government charged with enforcing the laws.

³⁴⁸ (PhR §84). This problem is similar to Kant's problem of "indeterminacy of private right". In the *Doctrine of Right*, Kant argues that the problem of indeterminacy of private right (both acquired rights and at least some elements of natural right, such as a right to self-defense, inheritance by bequest, etc.) allows

of Abstract Right cannot ensure that the retribution it requires as a mitigation of crime is, and is seen by all parties to be, *just punishment* rather than revenge. Overcoming these problems requires “a justice freed from subjective interest and subjective shape and from contingency of power”, which Abstract Right cannot establish on its own. An adequate realization of the concept of right, and of personal freedom, Hegel argues, demands a transition to a higher stage in the will’s development. This stage must articulate principles that can ground the inter-subjective agreement needed for the realization of Abstract Right; principles that require that a will, “as a particular and *subjective* will, also wills the universal”.³⁴⁹ In this way, Hegel claims, the concept of Morality necessarily emerges in the course of the development of the will.

The focus of Hegel’s discussion of Morality is *moral freedom*, which requires the right of individuals to determine for themselves, based on their own rational reflection, what is right and good. At this stage the individual’s will is considered in its relation to the wills of others and to the external reality in which its actions take place. That is, Hegel’s articulation of this shape of the *Idea of right* is concerned with the relation between the first-person deliberative standpoint of an individual subject’s willing universal principles, on the one hand, and imputation and normative assessment of her actions as deeds in the external world (as their “aim translated into external

for the possibility of disputes that can be conclusively solved only in the civil condition with an independent judiciary branch whose role is to apply the law to particular cases by interpreting objective standards from a universal perspective. In the case of property rights, Kant remarks that “indeterminacy, with respect to quantity as well as quality, of the external object that can be acquired” is the hardest of all to solve (MdS 6:266), but suggests that indeterminacy in general can only be mitigated by a judiciary that has authority to adjudicate particular cases in accordance with the law.

³⁴⁹ (PhR §103).

objectivity”³⁵⁰), on the other. It is also concerned with the way a person’s practical judgments bear on the judgments and normative standing of others. Hegel points out that the Moral standpoint introduces a crucial insight of the modern age – it requires that moral principles and claims be justified to the subject and refuses to endorse anything simply based on authority or force, for example. He calls it “the highest right of the subject” – “the right to recognize nothing that I do not perceive as rational”.³⁵¹

Hegel credits Kant with this insight, and praises him for recognizing self-determination as essential to the will and as the ground of duty. Yet, at this stage, Hegel levels some of his most direct criticisms at Kant’s practical philosophy and post-Kantian “subjectivist” theories of morality (especially those of Fichte and Fries).³⁵² This critique is intended to be “immanent” in the same sense as Hegel’s critique of Abstract Right is immanent – it purports to show that a given standpoint has inherent limitations, or generates its own antinomies, which cannot be resolved without going beyond this standpoint and re-conceiving its insights within a new framework of thought. At this stage, he tries to show that “subjectivism”, as he calls it, generates its own internal contradictions that cannot be overcome without abandoning some of its basic commitments.

³⁵⁰ (PhR §132).

³⁵¹ (PhR §132R) Hegel also refers to this right as the right of the subjective will: “The *right of the subjective will* is that whatever it is to recognize as valid should be *perceived* by it *as good*, and that it should be held responsible for an action – as its aim translated into external objectivity – as right or wrong, good or evil, legal or illegal, in accordance with its knowledge of the value which an action has in its objectivity.” (PhR §132)

³⁵² For the purposes of this chapter, I focus on those parts of Hegel’s account of Morality that deal with Kant’s moral theory.

For one thing, Hegel argues that, on its own, the standpoint of Morality cannot solve the problems that emerged in the system of Abstract Right. It cannot ensure that what a subject judges to be right and good actually fully translates into reality. It is a contingent matter whether what the moral will thinks *ought to be* actually *is* realized in actions, or embodied and recognized in institutional structures that make possible proper functioning of the system of private right.

In addition to his criticism of Kant's moral philosophy considered in the previous section, Hegel stresses that one of Morality's most fundamental internal limitations is its lack of "objective determinacy". That is, he claims that Morality does not have the ability to specify *exactly*, and in a thoroughly non-arbitrary way, what our duties are in particular cases and to determine whether our particular ends are objectively good. It has to rely on the individual's particular "subjective education"³⁵³, conscience and powers of reasoning to make this determination in particular cases, and falls into subjectivity. In other words, Hegel argues that the standpoint of Morality (and of Kant's moral philosophy, in particular) *on its own* is unable to fulfill its aspirations to genuine practical knowledge of the right and the good.

Part of what Hegel means when he complains about the lack of "objective determinacy" in Kant's moral philosophy is this. In Kant's theory, duties of virtue, such as a duty of beneficence, are wide and (at least to some degree) imperfect.³⁵⁴ They leave

³⁵³ (PhR §132R).

³⁵⁴In the *Doctrine of Virtue*, Kant says, for example, that ethics necessarily falls into casuistry and "because of the latitude it allows in its imperfect duties, unavoidably leads to questions that call upon judgment to decide how a maxim is to be applied in particular cases". (MdS 6:411). Similarly, Kant writes: "if the law can prescribe only the maxim of action, not actions themselves, this is a sign that it leaves a playroom (*latitudo*) for free choice in following (complying with) the law, that is, that the law cannot specify precisely in what way one is to act and how much one is to do by the action for an end that is also a duty. ..The wider the duty, therefore, the more imperfect is a man's obligation to action; he, nevertheless, brings

us some latitude for deciding on what occasions and how to promote morally required ends and for the guidance of choice by the principles of prudence. They allow one, for example, “to limit one maxim of duty by another (e.g., love of one’s neighbour in general by love of one’s parents)”.³⁵⁵ In other words, imperfect duties are not fully determinate with respect to their content. Individual judgment determines imperfect duties in particular cases and various pragmatic considerations are morally permissible at this level provided that they do not conflict with an agent’s overall commitment to objective ends – of promoting the happiness of others, for example. Hegel thinks that this often creates intractable dilemmas for the individual, or at least makes it inordinately difficult for her to figure out how properly to reconcile her various obligations and interests:

“[T]here are always *several sorts* of good and *many kinds of duties*, the variety of which is a dialectic of one against another and brings them into *collision*. At the same time, because the good is one, they *ought* to stand in harmony; and yet each of them, though it is a particular duty, is as good and *as duty* absolute. **It falls upon the agent to be the dialectician** which, superseding this absolute claim of each, concludes such a combination of them as excludes the rest.” (*Philosophy of Mind*, §508, my emphasis)

In other words, this transfers the hard work that philosophy is supposed to do to individual deliberating agents who are not in a position to do it, and substitutes objective truth about the right and the good for subjective certainty.

From Hegel’s point of view, the very form of Kant’s moral theory leads to its lack of objective determinacy and its inability to articulate the structure of the ethical world. It makes the latter into an empty ideal that can be merely infinitely approximated but never

closer to *narrow* duty (duties of right) the maxim of complying with wide duty (in his disposition), so much the more perfect is his virtuous action. **Imperfect duties alone are, accordingly, duties of virtue.**” (MdS 6:390, my bold)

³⁵⁵ (MdS 6:390).

fully achieved.³⁵⁶ Thus, he notes, “Whereas we earlier emphasized that the point of view of Kant’s philosophy is sublime inasmuch as it asserts the conformity of duty and reason, it must be pointed out here that this point of view is defective in that **it lacks all articulation**”.³⁵⁷ Kant’s presupposed “divorce between concept and reality” and its consequences, including derivation of particular duties by applying the categorical imperative to externally given material, create a theoretical foundation that cannot ground a theory of duties that are both objective and determinate. What Hegel claims is that it is impossible to give any articulation of the idea of ethical community – genuinely to transition to ethics – while maintaining these methodological commitments. This is one of the central aspects of Hegel’s “empty formalism” charge against Kant in the *Philosophy of Right*. The following is, perhaps, its most direct formulation:

“However essential it may be to emphasize the pure and unconditional self-determination of the will as the root of duty – for knowledge of the will first gained a firm foundation and point of departure in the philosophy of Kant, through the thought of its infinite autonomy – **to cling to a merely moral point of view without making the transition to the concept of ethics reduces this gain to an empty formalism, and moral science to an empty rhetoric of duty for duty’s sake**. From this point of view, **no immanent theory of duties is possible**. One may indeed bring in material *from outside* and thereby arrive at *particular* duties, but it is **impossible to make the transition to determination of particular duties** from the above determination of duty as absence of contradiction, as *formal correspondence with itself*... Kant’s further form – the capacity of a maxim to be envisaged as a *universal* maxim – does yield a more *concrete* representation of the situation in question, but it does not in itself [*für*

³⁵⁶ In the *Encyclopedia Logic*, Hegel writes that, in the Kantian system, the objective good – posited as “the final purpose of the world” – “is an abstraction lacking all determination”. What he finds objectionably and un-philosophic, as it were, is that the harmony between morality and nature (rightly) contained in the idea of the highest good is, for Kant, a matter of rational faith, not of knowledge. The final purpose “is determined as something merely *subjective* – as what only *ought* to be; i.e., what does *not* at the same time have *reality*. It is something *believed* that can only claim subjective certainty, not truth; i.e., *not* that objectivity which corresponds to the Idea”. (EL §60) Hegel thinks that this is a result of the basic presuppositions of Kant’s theory discussed in section 1 of this chapter, and, fundamentally, of the “divorce between concept and reality”.

³⁵⁷ (PhR §135AH, my emphasis).

sich], contain any principle apart from formal identity and that absence of contradiction already referred to....

...**a contradiction must be contradiction with something**, that is, with a content that is already fundamentally present as an established principle.” (PR §135R, my bold)

And Hegel adds:

“The proposition ‘Consider whether your maxim can be asserted as a universal principle’ would be all very well if we already had determinate principles concerning how to act. In other words, if we demand of a principle that it should also be able to serve as the determinant of universal legislation, this presupposes that it already has a content; and if this content were present, it would be easy to apply the principle. But in this case, the principle itself is not yet available, and the criterion that there should be no contradiction in **non-productive** – for where there is nothing, there can be no contradiction either.” (PR §135A, my emphasis)

We may put this criticism in terms of the form of Kant’s science of morals. In chapter 1, I argued that Kant’s conception of method and of philosophy as science has the key characteristics of the Newtonian approach. This gives his system of morals what I have called “the Newtonian form” of science. That is, it is comprised of three strata – formal, coordinative, and applied. There are, therefore, two transitions Kant’s theory has to account for. The first transition – from the merely formal to the coordinative stratum – is the transition from a mere idea of the moral law to Kant’s formulations of the categorical imperative. The second transition – from the coordinative to the applied stratum – is a transition from the formulations of the categorical imperative and general *a priori* duties (such as obligatory ends of one’s own perfection and the happiness of others) to particular “applied” moral duties that stand under them. Hegel’s criticism of Kant’s system of morals can then be seen as directed precisely at these transitions, or, more specifically, at the impossibility of making these transitions in a non-arbitrary way within Kant’s system.

It is worth noting that Kant's ability to account for both of these transitions is still a live issue in contemporary discussions. A well known recent criticism that concerns the first transition is commonly referred to as the problem of a gap in the derivation of the categorical imperative.³⁵⁸ The problem is thought to lie in an apparently unwarranted inference from the mere idea of practical law (a purely formal and unproblematic, yet non-action guiding, requirement of practical rationality) to the canonical universal law formulation of the categorical imperative (a substantive and action-guiding principle).³⁵⁹ Although this problem was originally raised independently, it is now often seen as closely related to Hegel's criticism. Allen Wood, in particular, argues that this gap, rather than the emptiness of Kant's formula of the universal law, is the main target of Hegel's objections. Much progress has recently been made towards answering the problem of the gap in the derivation of the categorical imperative,³⁶⁰ and for the purposes of this chapter, I will have to set consideration of this problem aside. Moreover, while Hegel certainly believes that there is a gap in Kant's derivation of the categorical imperative (that the connection of the categorical imperative to practical reason is not, and cannot be,

³⁵⁸ This difficulty was first discussed in detail by Bruce Aune in *Kant's Theory of Morals*, pp. 29-30. Allen Wood has later argued that this difficulty – the impossibility of deriving an action guiding moral principle from a mere concept of practical law – is the main target of Hegel's "empty formalism" charge against Kant. See e.g., Allen Wood, *Hegel's Ethical Thought*, Ch.9, pp.163-165.

³⁵⁹ Allen Wood argues, for example, that the idea that one's actions must conform to a universal law says only that an agent should act from the principle he *recognizes* as a law that *applies* to every rational agent as such (that the principle has what Wood calls 'universality of applicability'). It does not follow from this that an agent must be able to *will* that everyone also wills (is guided by) the same principle (that the principle has 'collective rationality'). See Allen Wood, *Hegel's Ethical Thought*, Ch.9, pp.163-169.

³⁶⁰ Here, I mean in particular Stephen Engstrom's *The Form of Practical Knowledge: A Study of the Categorical Imperative*. Christine Korsgaard's account of the essential 'publicity' of reasons also goes a long way towards addressing the issue, although she does not frame her discussion this way. See e.g., Christine Korsgaard's, *Self-Constitution. Agency, Identity, and Integrity*, ch.9. For a different, and much less extensive attempt to answer this problem, see Henry Allison, "On the Presumed Gap in the Derivation of the Categorical Imperative" in *Idealism and Freedom*.

properly shown through Kant's procedure), it is also clear that he does not take the universal law formulation to be adequately action-guiding either, even if it were properly derived from the nature of practical reason. "Kant's further form", as he puts it in the passage above, even though it yields some contentful judgments, "does not contain in itself any principle apart from formal identity and the absence of contradiction already referred to". So the problem of the gap cannot be the whole story, or even the most important aspect, of Hegel's critique.

My focus here, and in the rest of the dissertation, is on Kant's second transition – the transition from the categorical imperative as the foundation of morality to ethics.³⁶¹ From Hegel's point of view, it is at least as problematic as the first. Indeed, they seem to be two facets of the same underlying problem. The difficulty he sees with the second transition is that the categorical imperative cannot ground a system of ethics that ensures *determinacy* and *objectivity* of duties. While a transition to ethics is necessary in order determinately to specify duties and ensure that the theory is properly action-guiding³⁶², this transition cannot be made in a non-arbitrary way *within the framework of Kant's theory*. Given the form and the method of Kant's moral philosophy, an attempt to make this transition makes the content of particular duties dependent on external contingent factors that are not themselves properly justified. In other words, the transition to ethics cannot be made

³⁶¹ A prominent contemporary treatment of questions concerning the second transition is Barbara Herman's work on a Kantian "middle theory" – a theory which she locates between the completely a priori "high theory" investigation of the moral law and the empirical "low theory" investigation of moral judgment in specific cases.

³⁶² Recall Kant's claim in the *Metaphysics of Morals* that "just as a passage from the metaphysics of nature to physics is needed – a transition having its own special rules – something similar is rightly required from the metaphysics of morals: a transition which, by applying the pure principles of duty to cases of experience, would schematize these principles, as it were, and present them as ready for morally practical use." (MdS 6:468)

without rethinking the basic methodological commitments of the standpoint of morality and their consequences – “From this point of view, **no immanent theory of duties is possible.**”

One way to think of what Hegel finds problematic with Kant’s second transition is this. A Kantian agent’s reasoning under the categorical imperative is conditioned by various interconnected practices, customs, beliefs, and institutions embodied in a particular way of life in which she is immersed; it presupposes the validity of a number of background conditions of this kind because the maxims are evaluated within the context of a particular social world. The objectivity or truth of the agent’s moral judgments will depend on whether these background conditions are themselves justifiable and can be shown to express freedom.³⁶³ That is, thoroughly reasonable and fully justified social practices, institutions, and substantive principles must background the individual’s moral reasoning, if it is to result in objective practical judgments. But, the categorical imperative is a formal principle and cannot on its own be used to specify a system of institutional elements constituting a reasonable, morally justified social world. This is what Hegel means when he calls the categorical imperative “non-productive”. Moreover, given the form of Kant’s theory, an attempt to provide such an articulation involves application of the categorical imperative to external material that is not itself justified, introducing subjectivity – be it contingent empirical facts about human nature or some

³⁶³ In addition, the categorical imperative’s primary function is to guide individual moral reasoning. The fact that individual power of judgment is shaped by further contingent factors, such as natural dispositions, familial influences, social position, life experiences, and the like, tends to further increase variability in interpretation of the meaning of general moral duties and principles, and to introduce additional subjectivity. We have the capacity to make genuinely objective moral judgments. But, as I will argue in the next chapter, full realization of this capacity in practice, and, therefore, full-fledged objectivity of our actual moral judging, requires what Kant refers to as the ideal ethico-civil society (eventually encompassing the whole of humanity) that would establish shared principles and practices as public moral laws and embody them in its social structures.

norms that are tacitly presupposed to be valid (these may include even such a basic norm as the wrongness of free-riding, for example). Thus, Hegel sees this procedure as in principle unable to articulate a fully objective ethical order. He writes,

“A theory of duties, unless it forms part of philosophical science, will take its material from existing relations and show its connection with one’s own ideas and with commonly encountered principles and thoughts, ends, drives, feelings, etc...An immanent and consistent theory of duties can be nothing other than the development of those relations which are necessitated by the Idea of freedom.” (PhR §148R, my bold)

Kant, I believe, would agree that his theory does not provide and cannot ground an “immanent” theory of duties, in the sense Hegel understands it. Indeed, this follows from the form and method of Kant’s science of morals. Duties, in Kant’s theory, cannot be determined fully through the categorical imperative alone. Their determination does require application to empirical concepts and phenomena of practical life. But, the key question is: Is an “immanent” philosophical theory of duties a genuinely desirable aim for practical philosophy? I will consider the plausibility of Hegel’s answer to this question in the last section of this chapter.

2.2

According to Hegel, the “lack of objective determinacy” and other internal contradictions within the moral standpoint necessitate a transition to the stage of Ethical Life (*Sittlichkeit*). He tries to demonstrate how the limitations of the preceding stages of the development of the Idea of right are overcome once they are understood as aspects or moments of Ethical Life – an ethical community in which personal, moral, and political freedoms can *in fact* be fully realized and which embodies these freedoms. On their own, however, Abstract Right and Morality are only abstractions from the concrete life of a community. At the same time, Ethical Life preserves the central insights of these prior

stages by reframing and integrating these insights, as it were, in the “concrete” context of ethos. His account of Ethical Life articulates the objective ethical order – “the world of mind produced out of itself like a second nature”.³⁶⁴ I will say more about what this means in a moment. But, first, it is worth noting that the progression through the stages of Abstract Right and Morality, leading to the stage of Ethical life, is supposed to *prove* that Ethical Life is the *truth* of the concept of right or of freedom. Hegel writes:

“The fact that this Idea is the *truth* of the concept of freedom is something which, in philosophy, **must be proved, not presupposed**, not derived from feeling or any other source. This deduction is contained **only** in the fact that right and the moral self-consciousness both display in themselves their regression to this Idea as their result.” (PhR §141)³⁶⁵

That is, according to Hegel, this deduction consists in showing that the system of private right (expressing the demands of *personal freedom*) and individuals’ *moral freedom* can be completely realized and be in full harmony with each other *only* within the life of an ethical community.

Assuming this deduction works, consider what it entails for Hegel. What is Ethical Life? On Hegel’s account, the inner development of the will culminates with the logical articulation of Ethical Life as a self-sufficient ethical order that fully expresses and realizes in the social world the concept of free will in all its aspects, and is recognized by its individual members as realizing their essential nature as free beings. They see its system of institutions (which are *in-itself* rational and reasonable) as rationally justified and friendly to their aspirations to freedom, and identify with these institutions.³⁶⁶ This

³⁶⁴ (PhR §4).

³⁶⁵ “The right and the moral cannot exist independently; they must have the ethical as their support and foundation,” (PhR §141A)

³⁶⁶ “Ethical life is accordingly the concept of freedom which has become the existing world and the nature of self-consciousness.” (PhR §142)

makes Ethical Life a fully *self-conscious* unity of particular and universal will, and of subjective and objective good.

Hegel conceives it as a life within a system of ethical norms embodied in political and social institutions, or “*the state*”, conceived broadly as comprising family life, civil society, and the political state. Each of these parts of Ethical Life is further articulated into its characteristic institutional elements and their relations. For example, Hegel’s political state is organized through three powers – the legislative, the executive, and the power of the sovereign which unites the other two powers in the whole of the constitutional monarchy.

Hegel’s civil society mediates between personal and family interests, on the one hand, and moral and political interests, on the other. His discussion of civil society begins with an examination of private property economy. As a member of civil society, an individual pursues private and domestic ends with others pursuing the same kinds of ends of their own. They realize that their personal ends cannot be satisfied independently of the satisfaction of the ends and needs of others.³⁶⁷ But, private property economy, on its own, may have negative effects on the realization of freedom, since it tends to produce extremes of wealth and poverty and lead to conflicts between personal and universal interests. This requires further articulation of civil society into a system of juridical institutions, the Police, and the so-called “corporations”, all of which help to mitigate the negative effects of modern economic life and to integrate personal and universal interests.

³⁶⁷ In modern economic life “subjective selfishness turns into a contribution towards the satisfaction of the needs of everyone else...each individual, in earning, producing, and enjoying on his own account, thereby earns and produces for the enjoyment of others”. (PhR §199)

Consider, for example, Hegel's account of corporations. Corporations, which in many ways are analogous to (by Hegel's time long abolished) guilds, are legally constituted and legally recognized trade- or profession-based associations tasked, in the first place, with securing their members' interests. One of their main functions is to guarantee adequate livelihood of their members and their families. This includes providing a safety net against poverty and emergency assistance, as well as helping their members to develop the skills and talents required by their profession. Membership in a corporation serves as a basis for self- and social respect, securing recognition of an individuals' standing and of the value of his ends, in a society in general.³⁶⁸ In addition, corporations foster the ethos of public service and citizenship through their members' active participation in the corporate life and administration. Hegel's corporations also fulfill an important political and integrative function within the state. On the one hand, they provide political representation for their members by electing deputies to the lower house of legislature. On the other hand, Hegel argues that in order to ensure proper consideration of universal interests within corporations they must be partly administered by members of the executive branch. This internal structure is supposed to ensure that individuals come to see that their personal freedom (their pursuit of personal economic interests, for example) is not in conflict with moral freedom or with the universal interests of the state. Rather, they are able to recognize that in promoting personal ends they are promoting universal ends as well. Thus, on Hegel's account, as a part of civil society, corporations mediate between and integrate particular and universal interests within Ethical Life.

³⁶⁸ This aspect of Hegel's account of corporations recalls Rawls's idea that an individual's self-respect in a well-ordered society is supported and shaped by her access to interest-based associations and communities that provide context for self-development and recognition by others. See, e.g. John Rawls, *A Theory of Justice*, revised edition, pp. 386-388.

2.3

Two features of Hegel's Ethical Life warrant particular emphasis, not least because they are closely connected with Hegel's criticism of Kant's moral philosophy and help to demonstrate what he takes to be the advantages of his own ethical theory. Both of these are expressions of his speculative method as "objective" thinking about freedom.

First, the articulation of Ethical Life serves as the "*immanent*" (in the *Idea* of right) ethical theory or doctrine of duties [*Pflichtenlehre*] – the only theory of ethical duties that treats duties "objectively", as *concrete* action-guiding moral requirements, in Hegel's view. To say that a theory of duties is "immanent" is to say that it grounds the determination of duties in the essential nature of the will. In fact, Ethical Life is not a theory of duties in any ordinary modern sense, since it does not attempt to specify the content of particular duties in the way Kant does in the Doctrine of Virtue, for example. In Hegel's theory, ethical duties are embodied in the functioning of institutions of Ethical Life and *fully determined* by the life of these institutions and the social roles they specify. They are also *genuinely objective*, in Hegel's sense, because they are determined "concretely" by social roles within an objective ethical order that is fully rational and justified to individual reason. The *Philosophy of Right* claims to prove this objectivity by deducing and articulating the ethical order through the "immanent" scientific procedure that exhibits the *necessity* of relations within the system of Ethical Life. According to Hegel, it shows the articulated system of institutions and rights within Ethical Life to be a necessary result of the self-development of the will and makes explicit its actuality. It is this *rational necessity* that, in Hegel's view, distinguishes his system of duties from Kant's theory, which he sees as infected with contingency and subjectivity. Here is how

he describes his ethical theory of duties and the method by which alone this kind of “immanent” theory can be developed:

“The ethical theory of duties – i.e., **in its objective sense**, not as supposedly comprehended in the empty principle of moral subjectivity, which in fact determines nothing...– therefore consists in that **systematic development of the circle of ethical necessity** which follows here in *Part Three* of the work. The difference between its presentation here and the form of a *theory of duties* [e.g., Kant’s theory] lies solely in the fact that **the following account merely shows that ethical determinations are necessary relations**, and does not proceed to add in every case ‘this determination is therefore a duty for human beings’. – **A theory of duties, unless it forms part of philosophical science, will take its material from existing relations** and show its connection with one’s own ideas and with commonly encountered principles and thoughts, ends, drives, feelings, etc..... But an **immanent and logical theory of duties can be nothing other than the development of those relations which are necessitated by the Idea of freedom, and are therefore actual in their entirety, within the state.**” (PhR §148R, my bold)

Indeed, Hegel claims that his theory of Ethical Life solves problems that are intractable from the standpoint of Morality. The fact that ethical duties are embodied in the institutions of Ethical Life, Hegel argues, solves the problem of the “objective determinacy” of moral requirements – the problem that “theories of duties”, like that of Kant, necessarily encounter. In following the duties immanent in Ethical Life, the individual is relieved from being a “dialectician”; he is liberated from “the burden he labors under in his moral reflections on obligation and desire”.³⁶⁹ This is because certain questions and problems that, in the ordinary “theory of duties,” are supposed to be addressed primarily to *individual* agents, such as what a duty of beneficence requires of us under certain conditions, are addressed at the level of social institutions of Ethical Life. No complicated reasoning or extensive factual knowledge is needed to know what one ought to do, only proper education and socialization into one’s ethical community:

³⁶⁹ (PhR §149).

“[I]n an ethical community, it is easy to say what man must do, what are the duties he has to fulfill in order to be virtuous: he has simply to follow the well-known and explicit rules of his own situation [of his established relations]” (PhR §150)

On this account, ethical duties are given by political and social institutions as forms of ethical life that guarantee and express individuals’ freedom. An individual lives a good and fulfilling life by doing her duties – by being a good citizen, parent, engineer, member of a trade or interest-based association, etc. This aspect of Hegel’s view, with its emphasis on the fundamental role of institutions of ethical life, may perhaps be compared to John Rawls’s view of pure procedural justice: if there is a correct or fair procedure, if our institutions conform to the difference principle, no question need to arise about whether things are being distributed correctly to *individuals*.

Moreover, as a member of Ethical Life, an individual is liberated from his dependence on natural drives conceived as external to morality, which enables him to achieve genuine *subjective* or *moral* freedom. This is because, in Ethical Life, freedom becomes *actual* as a *second nature*. When individuals are educated into Ethical Life and, under reflection, recognize it as rational, they come to identify with its system of institutions and principles, and acquire a natural disposition (a second nature, as it were) that motivates them to act in a right way. At this stage, “the ethical, as their general mode of behavior, appears as custom; and the habit of the ethical appears as a second nature which takes the place of the original and purely natural will”.³⁷⁰ The individual’s sensible drives and desires – being shaped by education into an ethical community with which he identifies – are shaped by his free will and express its freedom. That is, sensible desires and drives are no longer seen as material external to free will. They are no longer

³⁷⁰ (PhR §151).

experienced as a barrier that the finite will, in its freedom, necessarily strives to overcome, but can never fully do so. They are now recognized as themselves aspects or manifestations of the free will.³⁷¹

Finally, Hegel stresses that in Ethical Life, an individual's *subjective* will becomes also *objective* – “he is liberated from that *indeterminate subjectivity* which does not attain *existence* or the *objective determinacy of action*”³⁷² As a member of an ethical community who possesses ethical character, a person knows that he and his standing in a society is recognized and respected, and that it is the system of Ethical Life that makes this standing both possible and actual. He also knows that it is his participation in the ethical community that makes his particular ends both *objectively good* and realizable. He knows that in pursuing his particular ends he is also motivated by universal concerns and contributes to the good of the community, and that his conception of the good, so to speak, is recognized as good and worth pursuing by others:

“[T]he ethical character knows that the end that moves it is the universal, which... has developed through its determinations into actual rationality, and it recognizes that its own dignity and the whole continued existence of its particular ends are based upon and actualized within this universal.” (PhR §152)

³⁷¹ Hegel argues that Kant's theory, in particular, fixes the opposition between our sensible impulses and the will. On this picture, he claims, the will aims to dominate our sensible nature by demanding the “purification” of our sensible drives, so that they put up least resistance to it, so to speak. On Hegel's own theory, the drives are seen as manifestations of the will itself; their “purification” is seen as socialization into Ethical Life and reflective awareness of their harmony with the will's freedom. He writes: “In the demand for the purification of impulses there lies the general notion that they should be freed both from their form as immediate and natural determinations, and also from the subjectivity and contingency of their content... The truth behind this vague demand is that the impulses should become the rational system of the will's volitions. To grasp them like that, proceeding out of the concept of the will, is the content of the philosophical science of right.” (PhR §19)

³⁷² (PhR §149).

At this stage, for individuals who are conscious of themselves as members of Ethical life, their freedom is not a matter of faith, trust, or subjective certainty, but of genuine practical self-knowledge.

The **second** feature of Hegel's account I want to emphasize is that he attempts to articulate the necessary structure of the state as an *organic whole* of its various elements by proceeding according to the categories of the dialectic developed in his logical works. For example, Hegel wants to exhibit the rationality of the constitution of the state by showing that its institutions are aspects of an organic unity that manifests the dialectical "logic of the Idea". Thus, the legislative power emerges as the moment of *universality*, the executive power as the moment of *particularity*, and the sovereign power as *individuality* (or ethical personality) that unites the moments of universality and particularity into the ethical whole of constitutional monarchy.³⁷³ In the same way, Hegel's further articulation of each of these powers is intended to exhibit their logical interrelation and dialectical structure. His specification of various other aspects of Ethical Life, including the organization of society into the three estates, the structure of corporations, etc., proceeds in a similar "logical" manner.

The system of Ethical Life is put forward as "the circle of *ethical necessity*"³⁷⁴ which embodies and expresses the essential nature of the Idea of right. The logical progression of Hegel's articulation is supposed to ensure the inner *necessity of the transitions and relations* among various elements of the organic whole of Ethical Life. Exhibiting Ethical

³⁷³ Hegel writes, for example, "The constitution is rational in so far as the state *differentiates* and determines its activity within itself *in accordance with the nature of the concept*. It does so in such a way that *each* of the *powers* in question is in itself the *totality*, since each contains the other moments and has them active within it, and since all of them, as expressions of the differentiation of the concept, remain wholly within its ideality, and constitute nothing but *a single individual whole*." (PhR §272)

³⁷⁴ (PhR §148).

Life as the “circle of ethical necessity” is supposed to enable the philosophical science of right to fulfill its role as philosophy of reconciliation. We have seen that a fundamental aim of this science is to make the actuality of freedom explicit in shared public consciousness. As such, for Hegel, this science itself plays a key *practical* role in the actualization of freedom as fully self-conscious, self-justifying practical thought embodied in all aspects of life of a social world.³⁷⁵ But how successful is the *Philosophy of Right* in achieving this aim of reconciliation? In the remainder of this chapter I will attempt to show that an answer to this question is closely tied to Hegel’s Goethean conception of philosophical science and its method.

3. The logic of Ethical Life and the aim of the philosophical science of right.

3.1

Even without getting into the details of Hegel’s articulation of Ethical Life in the *Philosophy of Right* we may wonder how successful this kind of project *can be*. What for Goethe was a general natural-scientific attitude is transformed, with Hegel’s Logic, into a *strict* philosophical method – the method of thought itself as *the Idea* that realizes, or particularizes, itself in any “particular specificity or medium”.³⁷⁶ This approach, as Hegel remarks in his *Philosophy of Nature*, turns metaphysics into “the diamond net into

³⁷⁵ Note that here again we can see the way in which Hegel’s philosophical method is, as he argues in Logic, equally analytic and synthetic. The *Philosophy of Right* proceeds *analytically* in “following” the development of the concept of freedom through all of its stages – through immanent critique of Abstract Right and Morality to the stage of Ethical Life – and identifying various distinct moments of Ethical Life. At the same time, it proceeds *synthetically*, given that each next stage in the development of the *Idea* of right preserves and completes the insights of the previous stages leading to a completely articulated system of right, and that comprehension of this development itself proves to be “the final step” in an actualization of freedom in its role as philosophy of reconciliation.

³⁷⁶ (EL §15).

which everything is brought and thereby first made intelligible”.³⁷⁷ But, can the (partly intuitive) Goethean approach, whatever its merits are for natural science, be successfully transformed into a philosophical method capable, as Hegel claims, of fully comprehending the nature of self-active, self-productive reason? Is it possible or desirable to try to develop a metaphysical structure of right able to serve as a “diamond net” for the life of a social world that is constantly evolving – a structure that once and for all fully explains the rationality of our practical life?

Indeed, Goethe, who praises Hegel for being “an amazingly accurate and acute man” with whom he has many intellectual affinities, is nevertheless worried about a similar set of issues. He questions Hegel’s attempt to place natural science within a “diamond net” of metaphysics and to give philosophy primacy over practice. Hegel’s student, E. Gans, recalls the following conversation with Goethe,

“[T]he question would always arise whether it was possible to be at the same time both a great scholar and observer and also an important generalizer and summarizer...[Goethe] acknowledged Hegel’s many insights both in nature and in history; but he could not refrain from questioning whether his philosophical ideas would not have to undergo continual modification in order to conform to the new discoveries which would undoubtedly constantly be made, losing thereby their categorical nature.” (*Gesprache*, III, 426f)

Goethe would not be the one to fault Aristotle for his lack of systematicity. Indeed, he is distrustful of speculative dialectic and concerned that it may be abused, since he sees that it extends beyond the realm of the empirical and is no longer shaped by the living activity found in Nature.^{378 379}

³⁷⁷ (EN §246, p.11).

³⁷⁸ This distrust is expressed, for example, in the record of Goethe’s conversations with Eckermann, “Hegel is here, whom Goethe personally esteems very highly, though he does not much relish some of the fruits produced by his philosophy. Goethe gave a tea-party in honor of him this evening...The discourse then turned upon the nature of dialectics. “They are, in fact,” said Hegel, “ nothing more than the regulated, methodically-cultivated spirit of contradiction which is innate in all men, and which shows itself great as a

3.2

The aim of Goethe's "objective thinking" is to comprehend the nature of its object (its *Urphänomen* or ideal type akin to the Aristotelian form or kind). It (plausibly) assumes this nature to be present and active, or actual, as it were, in individual members of a kind and, therefore, fully graspable by an objectively thinking scientific researcher.

talent in the distinction between the true and the false." "Let us only hope," interposed Goethe, "that these intellectual arts and dexterities are not frequently misused, and employed to make the false true, and the true false." "That certainly happens," returned Hegel; "but only with people who are mentally diseased." "I therefore congratulate myself," said Goethe, "upon the study of nature, which preserves me from such a disease. For here we have to deal with the infinitely and eternally true, which throws off as incapable every one who does not proceed purely and honestly with the treatment and observation of his subject. I am also certain that many a dialectic disease would find a wholesome remedy in the study of nature." (Conversations with Eckermann, October 18, 1827) On the other hand, Hegel saw it as a limitation of Goethe's approach that "out of hatred for the cogitation with which others have ruined the matter, he restricts himself completely to the empirical, rather than progressing beyond it to the other side, to the notion, which will succeed, at most, in becoming dimly visible." (Hegel's Letter to Schelling, 1807).

³⁷⁹In fact, Goethe finds an example of such an abuse of dialectical method in Hegel's own Preface to the *Phenomenology of Spirit*. In a letter to Seebeck, Nov 28, 1812, Goethe sounds appalled by Hegel's description of the phases of plant development as a kind of dialectic progress: "It is probably impossible to say anything more monstrous. To seek to destroy the eternal reality of nature through a bad sophistical joke seems to me completely unworthy of a rational man. If an empiricist, his mind chained to the earth, remains blind to ideas, one will pity him and allow him to go his way, will indeed derive much profit from his errors. But when an outstanding thinker who penetrates within an idea and knows quite well what it is worth, in and of itself, and what higher value it contains, in describing an immense process of nature, makes a joke of it, distorting it sophistically, denying and destroying it by means of words and phrases which artificially contradict each other, one simply does not know what to say" (Letter to Seebeck, Nov 28, 1812; cf. *Gesprache*. I, 457, Quoted in Löwith, p.14). Moreover, especially in his later essays, Goethe seems to recognize that there always remains a gap between experience and theory; that even in attempting to grasp the essence (*Urphänomen*) of things in nature through a complete series of contiguous experiments one is often overcome by the enormity of the task, given the variety of ways in which nature manifests itself and the fact that an archetypal phenomenon, *as such*, is not met with in experience, and its depiction is always an idealizing construction of a human mind: "For the observer never sees the pure phenomenon with his own eyes; rather, much depends on his mood, the state of his senses, the light, air, weather, the physical object, how it is handled, and a thousand other circumstances. Hence it is like trying to drink up the sea dry if we want to stay with the individuality of the phenomenon, observe it, measure it, weigh it, and describe it." (GSS, "Empirical Observation and Science", p.24). Ultimately, Goethe seems to accept Kant's conception of *complete (natural) science* as an Ideal of reason. When we consider structure of the universe as a whole, he writes, "[W]e meet the real difficulty, one we do not always see clearly: between idea and experience there inevitably yawns a chasm which we struggle to cross with all our might, but in vain. ... In the end, after an honest effort, we will probably find ourselves agreeing with the philosopher who asserts that no idea is fully congruent with experience, although he admits that idea and experience can and must be analogous" (GSS, "Doubt and Resignation", p.33). To my knowledge, Goethe does not explicitly discuss the possibility of extending his method beyond natural-scientific inquiry to the study of reason as a whole in his writings. But it seems clear that even if he thought such an extension were possible and desirable, the claim of the above passage would apply to it *a fortiori*.

In the *Philosophy of Right* Hegel presupposes the result of the *Phenomenology* – the proof that self-conscious, self-determining thought, not unlike the objects of Goethe’s researcher, is basically Species or Kind.³⁸⁰ It is *the Idea* that is fully present and active in the world, and in this sense actual. Moreover, philosophy is able fully to grasp the *Idea* by following a proper scientific procedure, which, I argued, has the key features of Goethe’s “objective thinking”. In the Introduction to the *Science of Logic*, Hegel tells us that the *Phenomenology* has the *concept* of philosophy as pure rational science for its result³⁸¹; it serves as a “deduction” of “a definition of science – or more precisely of logic”, which expresses the *content* and the *aim* of this science. The *content* of philosophy is itself “objective thinking” – “thought in so far as this is just as much the object in its own self, or the object in its own self in so far as it is equally pure thought.”³⁸² Its *aim* – “the supreme and ultimate *purpose* of science” – is “to bring about the *reconciliation* of the reason that is conscious of itself with the reason that *is*, or actuality, through the cognition of this accord”.³⁸³ The philosophical science of right takes this definition of science as given. It expresses it, in perhaps its most concise form, in the famous thesis “what is actual is rational, and what is rational is actual.”³⁸⁴

³⁸⁰ See, for example, (PhG §55). “It might seem as the term *Species* or *Kind* is too commonplace, too inadequate, for Ideas such as the Beautiful, the Whole, and the Eternal that are currently in fashion. But as a matter of fact *Idea* expresses neither more nor less than *Species* or *Kind*. But nowadays an expression which exactly designated a *Concept* is often spurned in favour of one which, if only it is of foreign extraction, shrouds the *Concept* in a fog, and hence sounds edifying.”

³⁸¹ (SL, p.48).

³⁸² (SL, p.49).

³⁸³ (EL §6).

³⁸⁴ (PhR, Preface, p.20). See also (EL §6).

I will not here try to assess whether Hegel's *Phenomenology* or his *Logic* achieve their aims. Instead, in the remainder of this chapter, I will argue that critical consideration of Hegel's philosophical science of right raises significant doubts about the viability of Hegel's practical philosophy.

Briefly put, the problem I see with Hegel's approach is this. The rigorous scientificity Hegel demands of a properly philosophical theory undermines the ability of his philosophical science to fulfill its declared aim. That is, the more organic systematicity and inner dialectical necessity a Hegelian science of right is supposed to exhibit, the less it is capable of helping individuals to reconcile with their social world and to serve as a final step, as it were, in the actualization of freedom.

Reconciliation, on Hegel's account, is possible under two conditions: (i) we must be able to see Hegel's Ethical Life as a fully rational ethical order that fully realizes our nature as free beings, and (ii) we must be able to recognize this order as in some sense *actual* in our own social world. The dialectical, organic systematicity, which Hegel requires of a properly scientific account of the system of right, is needed in order to satisfy both of these conditions. On the one hand, it is needed in order to convince us that the system he articulates is thoroughly rational and that it is a system within which freedom is fully realized in all its aspects (personal, moral, political). That is, we must be able to follow Hegel's articulation, recognizing the moments of its development as rationally necessitated by the preceding moments. Thereby, we are to be able to see the elements and relations it specifies as necessary aspects of the system, which, *as a whole*, is the "body of all conditions of freedom".³⁸⁵ On the other hand, in following Hegel's

³⁸⁵ (EG §486). See also (§§485-487; 488-552).

articulation, we are to be able to recognize in its determinations institutions and principles that (explicitly or implicitly) are at work in our own social world. That is, we are to be able to recognize that our social world is already governed by the logic of the concept of right; that all the essential conditions of freedom are already in place and that freedom can, *in fact*, be fully realized in this social order provided that various contingent defects are well understood and corrected. The important point is that this complete realization of freedom is *not* an ideal in Kant's sense – something that can only be ever more closely approximated. On Hegel's conception, Ethical Life as the realm of freedom is perfectly realizable. In what follows, I will argue that neither of the above conditions can be satisfied, given Hegel's approach.

Since Hegel conceives his philosophical science of right as an organic part of the circle of philosophy, the problems faced by the *Philosophy of Right* also challenge his conception of philosophical science in general. If successful, the argument of this section will raise doubts about Hegel's conception of reason as something like a "Kind" and call in question the possibility of the philosophical science that extends Goethean "objective thinking" beyond its original domain of the empirical to reason in general. For, if unlike Goethe's *Urphänomen*, reason's actuality (in this case, as practical thought) cannot be shown to be fully complete, as it were, it is doubtful that Goethe's approach that assumes the actuality of ideal types can be assimilated to the self-investigation of reason. And this, in my view, provides a deeper diagnosis of the problems facing Hegel's philosophy of right. At the same time, this result highlights the comparative attractiveness of Kant's Newtonian approach insofar as it leads to a moral theory that looks to the ongoing

continuously self-forming activity of reason, embodied and expressed in human practice, to reconcile us ever more fully (but never completely) with our social world.

Before I try to justify these claims, let me make one more preliminary remark. The way Hegel articulates the system of Ethical Life can be understood in one of at least two ways: either as a *strict dialectical proof* of the resulting articulation or as *interpretative dialectic* of the modern social world that is supposed to convince not by a strict argument but by its overall plausibility.³⁸⁶ I will argue that on either interpretation, Hegel's articulation of Ethical Life does not achieve its stated aim.

3.3

One of the central questions concerning Hegel's account of Ethical Life is how to understand his claim that the system of institutions this account depicts is *actual*. Not surprisingly, the matter is controversial. While I cannot assess the merits of various alternative proposals here, consider the following observations.

We may first note that Hegel's account of Ethical Life, as a systematic *whole* constituting "a circle of ethical necessity," in which "specific types of ethical life turn up as necessary relationships"³⁸⁷, is in an important sense *a priori* and depicts an *ideal*, even if unlike a Kantian ideal it is supposed to be fully achievable in practice.

The *ideality* of this order is best understood, in my view, as akin to that of a Goethean archetypal phenomenon, or an Aristotelian Idea. That is, Hegel's articulation is supposed to comprehend and express *an ideal type* that is the essence and the formative power of a developed modern society. Moreover, holding that central institutions of our social world

³⁸⁶ A similar distinction is drawn with respect to the *Phenomenology of Spirit* by Charles Taylor in *Hegel*, pp. 214-221.

³⁸⁷ (PhR §148).

(in basic outline and to some degree) embody and express rational demands, and enable exercise of personal, moral, or political freedom does not require that we take a *particular* Hegelian *configuration* of institutions to be *actual* in our world. The *organically-unified system* of institutions depicted in Ethical Life *as a whole* is not (and was not in Hegel's time) present *as such* in any ordinary sense. It is fair to say that Hegel's (or any Hegelian) articulation of this systematic order *as a whole* is an *a priori* philosophical *construction*.

The thesis "what is rational is actual and what is actual is rational", that underlies Hegel's conception of Ethical Life, can then be described, as Karl-Otto Apel does, for example, as a kind of "**counterfactual anticipation** of the *total mediation* of the *is* and the *ought*." This makes Hegel's account of Ethical Life an attempt to comprehend that life is rational from the absolute standpoint "as **speculatively extrapolated** by Hegel".³⁸⁸ From an everyday practical perspective, this conception still remains something that, perhaps, "ought to be" but is not. The existing institutions of any given developed society do not (at least not yet) have all the specific features that would enable them to form an *organic unity* which Hegel envisions in Ethical Life, for example. In other words, Hegel is attempting to give an articulation of the objective ethical order *a priori* – prior to the *specific configuration* of institutions he describes, and prior to the *total mediation* of 'ought' and 'is' it is supposed to embody.

At a first glance, this way of understanding Hegel may seem to be inconsistent with another central tenet of the *Philosophy of Right* – the claim that, like the owl of Minerva

³⁸⁸ Karl-Otto Apel, "Kant, Hegel, and the Contemporary Question Concerning the Normative Foundations of Morality and Right" in *Hegel on Ethics and Politics*, edited by Robert B. Pippin and Otfried Höffe, pp. 62-63.

that takes flight only after dusk, philosophy always arrives on the scene too late to tell the world how it ought to be; that philosophy is “its own time apprehended in thoughts”. Hegel has strong words for a philosopher who attempts to tell the world what it ought to be: “If his theory really goes beyond the world as it is and builds an ideal one *as it ought be*, that world exists indeed, but only in his opinions...where anything you please may, in fancy, be built”.³⁸⁹ So how can a claim that Hegel’s own understanding of Ethical Life is in a certain sense a speculative extrapolation be reconciled with avowals of this kind?

The inconsistency here is merely apparent, however. For when Hegel speaks of philosophy as its own time apprehended in thoughts he means, in the first place, that philosophy is concerned with *truth*, with hylomorphic unity of concept and its existence. It can comprehend the social world only as it presents itself in reality (either explicitly or implicitly) – for example, through reflection on principles to which people accord validity, even though these principles are not always fully at work in existing institutional life and are not always exercised in practice.³⁹⁰ As Dudley Knowles puts it, “[o]ur perspective is necessarily conservative since the only elements of the social world that are open to understanding and endorsement are either those that are in place, or those that immanent criticism will lead us towards”.³⁹¹ In the second place, Hegel tells us that in apprehending what is rational in our social world, philosophy “**builds it up** for itself into the shape of an intellectual realm”.³⁹² This “building up” or “re-constructing” of the real

³⁸⁹ (PhR, Preface, p. 21) Hegel adds that it is as foolish to think that philosophy can transcend the contemporary world as it is to suppose that an individual can overleap her own time or jump over the island of Rhodes.

³⁹⁰ I am grateful to Julius Sensat for stressing this point to me.

³⁹¹ See, Dudley Knowles, *Hegel and the Philosophy of Right*, Routledge, 2002, p.81.

³⁹² (PhR, Preface, p.13, ed. Knox; p.23, ed. Wood).

world into the shape of an intellectual realm is just what Hegel sees himself doing by speculatively extrapolating what is apprehended as actual in the world into an *a priori* scheme of Ethical Life. He sees himself as simply removing “the cloak of contingency” or the “rust and dust” from what is already present and active in the existing social world of his time.³⁹³ But this *removal* of the cloak of contingency is not a trivial matter. It is carried out through a *construction* of the “circle of ethical necessity” through the philosopher’s application of logical categories to practical thought, which is still a speculative extrapolation.³⁹⁴

Now, we may put the two necessary conditions of the ability of the philosophical science of right to fulfill its reconciliatory function this way. We must be able to see that Hegel’s philosophical extrapolation (the particular *system* of institutions of Ethical Life) expresses a rational order that fully realizes freedom. And, we must be able to see how

³⁹³ See for example Hegel’s *Lectures on the Philosophy of Right* 1819-1820:” The modern age has determined what is in itself rational and perfect through thought, and simultaneously removed the cloak of dust and rust from the positive. This is nothing but the fundamental principle of philosophy, of the free cognition of truth, no longer cloaked by contingency. The age has at present nothing to do but to cognize what it is at hand, and thus to make it accord with thought. This is the path of philosophy,” (VPR 19 290, quoted in Hegel’s *Elements of the Philosophy of Right*, ed. Allen Wood, p.391-2).

³⁹⁴ It is worth noting, that even with his focus on reconciliation rather than deliberation and reform, Hegel wants to ensure the right of moral subjects critically to reflect on existing norms. This is an aspect of preserving the central insight of the standpoint of Morality, namely the right of the subject to recognize as good only what he recognizes as rational and valid. Although this is a controversial matter, I believe it is reasonable to hold that Hegel wants his philosophical science of right to provide at least some level of practical guidance for individuals – not, to be sure, at the level of particular actions or maxims of action, but with respect to the overall functioning of their society. His theory of Ethical Life implies, for example, that statesmen have an obligation to work towards giving the political organization of their society a proper and reasonable shape that accords with the rational structure made explicit by the philosophical science of right. Moreover, to identify with one’s social world does not require seeing it as *perfect*. Rather, on Hegel’s account, it requires seeing it as *essentially rational* and, therefore, capable of fully realizing its rational form, which Hegel’s Ethical Life is supposed to depict. A person who comprehends this rational form can better understand what is imperfect about his own society (since restriction and defect, on Hegel’s view are properly understood in comparison with the Idea of the whole, which allows us to comprehend what principles in our social world are rational and why), and can work form within to improve it. But, in order to provide any practical guidance at all to someone who seeks to improve the present state of her social world – the real, messy world in which social and political institutions do not provide fully adequate ethical orientation – Hegel *has to* extrapolate.

this (or any possible) Hegelian extrapolation *as a whole*, with *all* its inner necessary relations and transitions, can be considered present and active, or actual, in our own messy social world. I will start with a brief reflection on the second condition and then come back to the first.

3.4

A plausible way to understand what Hegel means by the *actuality* of Ethical Life is to suppose that the kind of reconciliation he has in mind does not require that his articulation of ethical order *as a whole* be explicitly present and observable in the form of the modern state. Such a requirement may be too strong. After all, Hegel is well aware that the system of institutions he depicts in Ethical Life differs in many respects from those of any of the existing states of his time, including that of nineteenth-century Prussia. The Prussian state did not have a written constitution, trial by jury, representative legislature, constitutional monarchy, or corporations, for example.

What Hegelian reconciliation seems to require is a demonstration that certain institutional elements or principles that are already present in our social world, when grasped in their true shape (once the “rust and dust” of their various contingent flaws is removed), *would* stand in necessary organic relations to each other and to the whole of the state that fully realizes freedom. Once we grasp what is essentially rational in these social institutions, we would see them as “aspects of the *organism* of the state”³⁹⁵ and, therefore, as conditions and the embodiment of our freedom. Once we grasp the rational essence of old guilds, for example, we would be able to recognize their true form as Hegelian corporations and to see that (in this true form) they would stand in organic

³⁹⁵ (PhR §269, my emphasis).

relations to other elements and to the whole of the rational state depicted in Ethical Life. In other words, we can say that for the Hegelian reconciliation to be possible, his theory must demonstrate that certain institutional elements of our social world (when fully understood) are essentially able to form an organic whole of Ethical Life, even though this organic whole *as such* does not yet exist in any particular modern state. The science of right can be philosophy of reconciliation in this sense only if Hegel's demonstration succeeds either as a strict dialectical proof of a *uniquely necessary* way to specify the substantive ethical order or, at least, as the best possible or the most convincing interpretation of its inner structure and functioning. That is, the first condition of reconciliation – the requirement that we must be able to see Hegel's Ethical Life as a fully rational ethical order that fully realizes our nature as free beings – must be satisfied. In what follows I suggest that it is hard to see how Hegel's articulation (or any Hegelian articulation of the same kind) can satisfy this condition.

3.5

There are reasons to think that if Hegel's articulation of Ethical Life is intended *as a strict dialectical proof*, it does not succeed. One preliminary observation is that it faces a familiar problem of looking unviable or irrelevant from the present-day perspective. Historically speaking, a number of institutional elements in Hegel's articulation of Ethical Life (estates,³⁹⁶ primogeniture in land-owning families, or Hegelian corporations,

³⁹⁶ The three estates Hegel specifies are three mutually supporting social spheres or "systems of needs", as he calls them, that bring together those who make living in agriculture, those who work in trade and industry, and civil servants. The estates also play an important role in polity – individual land owners serve as unelected representatives of their estate in the upper house of legislature and individuals in the commercial estate are represented through deputies of their respective corporations in the lower house, and civil servants take part in the executive branch (as executive officers or ministers) and serve on a special advisory body for the parliament. In the *Philosophy of Right*, Hegel articulates the estates according to what he sees as their dialectical or logical progression – starting with the *substantial* (agricultural) estate and then moving on to the *formal* (trade and industry or commercial), and finally to the *universal* (civil service)

for example) are no longer part of a socio-political landscape. Moreover, a number of more specific aspects of this articulation, such as his views on poverty outside of corporations, or exclusion of women from direct membership in the institutions of civil society and the state, and, perhaps more surprisingly, exclusion of certain categories of male members of the agricultural and commercial estates (e.g. peasants, servants, etc.) from participation in the political life, are clearly unjustifiable.

One may object, however, that not even the most ardent Hegelian would argue that we should construct our system of institutions exactly as Hegel articulates it any more than a Kantian would want to understand marriage as a contract for the mutual use of each other's body. Supposedly, these particular aspects of Hegel's articulation are superficial and can be easily set aside or corrected without affecting the overall integrity and value of his account. With respect to many outdated elements of Hegel's view this may well be true, although proving this is not as simple as it is sometimes implied.

My point in drawing attention to these obviously problematic features of Hegel's ethical system is not to claim that Hegel's theory cannot be rid of these particular features. Rather, it is to suggest that their presence indicates a deeper issue, which, in my view, has implications for *any* account of the kind Hegel attempts. What I mean is the following. Besides its three main components (family, civil society and the state), Hegel's articulation of Ethical Life contains a number of very specific elements and relations that are supposed to ensure complete integration of personal and universal interests. These specific elements, as moments and relations in the "circle of ethical necessity", must be able to withstand, or be adaptable to, future social, economic, and

estate. This is but one example of the way Hegel's speculative logic of the *Idea* is at work in his science of right.

political changes. Such changes give rise to what Barbara Herman dubbed “new moral facts” – gender and race-related injuries, identity injuries arising from persecution of homosexuality, claims on behalf of the environment, non-human animals and economic justice, for example. We may add to this list a number of most recent global and international issues, including moral and political problems concerning emigration, refugee and migrant crises, as well as deep questions concerning the relationship between inner social and political institutions of a national state and international institutions in which the state participates. The latter, in particular, put pressure on the idea of a self-contained organic structure of the state Hegel endorses. New moral facts challenge our conception of what the realization of freedom requires by making visible, or providing a new perspective on, wrongs that were not previously appreciated due to their embeddedness in entrenched practices and traditions. They present us with moral problems that require critical reflection on and often modification of these practices. The question is: How are such changes handled in Hegel’s theory?

Now, we can think of moral change in two different ways. On the one hand, it seems true that many *apparently* new moral wrongs and relevant rights have not just come into being, but existed all along, or at least for quite a while. They were simply not visible and, therefore, not recognized as moral problems before certain social changes made them visible. What these moral problems require is further specification of the principles and fundamental rights that are already in place (say, further specification of rights that are already recognized in Hegel’s ethical order). This is similar to the way in which the abolishment of slavery in the United States was required by the principles of the Declaration of Independence, even though slavery was not publicly recognized as wrong

in relation to those principles until there had been significant social change. On the other hand, it is plausible to claim that some changes can give rise to *genuinely new* wrongs and *new* rights, as may plausibly be the case with certain issues concerning globalization. In the context of Hegel's account, changes of this kind would require revision of the fundamental structure of his ethical order.

As many liberal-democratic interpreters of Hegel's political philosophy correctly stress, Hegel does think that moral changes can be addressed through various public forums and arbitration within civil society and through the work of the legislature. Indeed, he describes the legislative power as having to do with "the further evolution of the laws and the progressive character of the universal concerns of government".³⁹⁷ Thus, among other things, the legislature is tasked with serving as a public forum for discussion and further specification of the civil rights of persons, communities and corporations.³⁹⁸

Frederick Neuhouser argues, for example, that the fact that the specific social order depicted in the *Philosophy of Right* does not exist anywhere in reality, that it is a rational reconstruction actual only in Hegel's technical sense, shows the possibility for social criticism within Hegel's theory. This means that "criticism and reform are consistent with the spirit of Hegel's theory, insofar as they aim at transforming institutions so as to make them conform more faithfully to the rational principles already implicit in their existent practices".³⁹⁹ In Neuhouser's view, this kind of criticism is perfectly consistent with the kind of affirmation of the social order that Hegel requires of its individual members

³⁹⁷ (PhR §298).

³⁹⁸ (PhR §299).

³⁹⁹ Frederick Neuhouser, *Foundations of Hegel's Social Theory*, p.257.

because what they (we) are supposed to identify with is not the social world as it exists in reality, but with its idealized version, as it were:

“no such conflict exists, since, strictly speaking, the proper object of our affirmation as socially free individuals is not institutions as they presently exist but something like “our institutions as they aspire to be, almost are, and in principle could be (if only we work hard enough to bring them better in line with their own ideals).”⁴⁰⁰

It seems true that Hegel’s theory allows, and perhaps requires, *some* forms of social criticism. We may note, however, that since Hegel claims that the system of Ethical Life is *the truth* of the concept of right – it articulates a *complete system of rights* that fully realize freedom – his theory implies that there could be no *genuinely new* moral wrongs and rights, and all *newly visible* moral problems can be fully handled within his system.

Moreover, in order to identify with and affirm “our institutions as they aspire to be, almost are, and in principle could be,” we have to be able to *trust* that emerging moral problems *can* be handled within the fully rational system of these institutions.⁴⁰¹ But, we can trust that emerging moral problems can be fully handled within Hegel’s system of rights only if we recognize that this logically-articulated system perfectly realizes freedom in all its forms; that it is a social order in which the internal contradictions and tensions that could possibly have lead to a radical change in its basic structure are already resolved. As far as I can see, Hegel offers no *independently* decisive or convincing reasons for thinking that *all* emerging moral problems can *always* be sorted out within the

⁴⁰⁰ Frederick Neuhouser, *Foundations of Hegel’s Social Theory*, p.259.

⁴⁰¹ At first glance, this may seem inconsistent with Hegel’s thesis of historical opacity – the thought that solutions grow out of existing problems and generate new problems in ways that cannot be anticipated. Yet, although the specific ways in which new problems emerge and are solved within the system cannot be anticipated, what can be anticipated, given his conception of Ethical Life as the truth of the concept of freedom, is that they *will* be solved within the overall scheme of institutions it specifies.

system of Ethical Life without significantly affecting the (rather elaborate) structure of relations presented as internally necessary.

And *if* it is plausible (as history and experience suggest) that genuinely new moral problems do arise and that some of these problems cannot in fact be addressed within the structure of Hegel's Ethical Life without requiring considerable revisions to its fundamental structure, the claim that his articulation of the ethical order (or any articulation of this kind) possesses the requisite inner necessity and fully realizes our freedom is undermined.⁴⁰²

3.6

Further reasons to doubt the inner necessity of Hegel's account of Ethical Life as a system that fully realizes freedom, or to question its success as an interpretative dialectic, come from consideration of direct challenges to Hegel's theory by 19th century critics whose views were in many ways influenced by Hegelian ideas. Marx's critique of the *Philosophy of Right* stands out in particular. On the one hand, Marx praises Hegel's organic conception of the state. In his critical notes on the *Philosophy of Right*, he calls it "a great advance to consider the political state as an organism, and hence no longer to

⁴⁰² Suppose, however, that Hegel intends his articulation of Ethical Life to function as a dialectical proof adequate *only* for his own age and its level of social and philosophical development. After all, Hegel holds that philosophy is "its own time apprehended in thoughts." In other words, perhaps Hegel would allow that the specific way freedom is actualized, and the way it is logically articulated in Ethical Life, itself changes as society develops. I don't think this way of looking at things is promising for at least the following reasons. To begin with, it seems to allow Hegel's account to have a very short life span, which significantly minimizes the ability of *Philosophy of Right* to effect reconciliation. Moreover, the possibility of different future articulations of Ethical Life raises some natural questions about the validity of Hegel's claim that his (or, for that matter, any Hegelian) system of right *fully* realizes and expresses our nature as free rational beings. This reading also appears to be methodologically problematic, given Hegel's expressed commitments. For, if we allow that our rational nature in some sense continues to evolve, it becomes unclear how Hegel could avoid positing an infinite progressive sequence of such articulations approximating the one that most adequately realizes our rational nature. Such a fully adequate articulation would then appear to be something akin to a Kantian idea – a notion antithetical to the very core of Hegel's conception of philosophy as science. So, it is hard to see how this reading could alleviate the doubts about the possibility of reconciliation at which Hegel's philosophy aims.

consider the diversity of powers mechanically, but rather as living and rational distinction.”⁴⁰³ On the other hand, Marx sharply criticizes Hegel’s presentation of this “discovery”. Indeed, we can say that part of what Marx does is to argue that Hegel’s interpretation of this “discovery” is arbitrary.

Marx’s critique is a complicated matter, and I will only mention a few points that are most relevant to my present argument. In his discussion of Marx’s *Critique of Hegel’s Philosophy of Right*⁴⁰⁴, Julius Sensat points out, for example, that Marx regards Hegel’s account of full integration between state and civil society both as *unsuccessful on its own terms* and as *utopian in its aim*. Marx argues that it is unsuccessful on its own terms because it fails to provide an *organic synthesis* of universal interests (those of the state) and particular interests (those of family and civil society) and retains the dualism between them. Marx takes Hegel’s articulation of the unity of civil society and the political state to be an example of this. In particular, on Hegel’s account, the corporations of civil society are supposed to resolve the opposition between private property (or strategic rational interests of its members) and the interests of the state, in part, by selecting their officials (directors, managers, and the like) through a “mixture of popular election by the interested parties, and confirmation and determination by a higher authority” of the state.⁴⁰⁵ Marx argues (convincingly) that this process fails to unify organically particular and universal interests, calling Hegel’s appeal to mixed election “a mere *accommodation*, a disquisition on and an admission of an unresolved dualism that is itself a *dualism*, a

⁴⁰³ Karl Marx, *Critique of Hegel’s Philosophy of Right*, ed. O’Malley, p.11. (1843, comment on §269)

⁴⁰⁴ Julius Sensat, *The Logic of Estrangement: Reason in the Unreasonable Form*, Palgrave Macmillan, 2015, pp. 85-87.

⁴⁰⁵ (PhR §288).

“mixture”.⁴⁰⁶ Marx considers Hegel’s account of full integration of political state and civil society *utopian* because the development of personal freedom (freedom to pursue one’s own strategic rational interests) requires separation of civil society from the state. But this means that one’s status as a citizen of the state must at the same time be separated from one’s status as a member of civil society – one’s status as a citizen cannot be dependent on one’s socio-economic circumstances. Personal freedom is only possible together with establishment of a political state in which citizenship is a status enjoyed by everyone regardless of one’s position or relations in the civil society: “The *establishment of the political state* and the dissolution of civil society into independent *individuals* – who are related by *law* just as men in the estates and guilds were related by *privilege* – take place in *one and the same act*.”⁴⁰⁷

Fundamentally, Marx’s objection is that Hegel attempts to employ the speculative “logic of the concept” to justify (claim necessity for) what in fact is an arbitrary construction that collects together various modern institutions and existing reform proposals. He accuses Hegel of the same sin with which Hegel himself charged his modern predecessors – imposing external and abstract conceptual scheme (his logic) on the subject matter of the philosophy of right. In a sense, Marx comes to regard Hegel’s philosophical science of right as caught in the “diamond net” of his system of logic and, in a kind of justificatory reversal, as serving to justify this logic:

“In truth, Hegel has done nothing but resolve the constitution of the state into the universal, abstract idea of the organism; but in appearance and in his own opinion he has developed the determinate reality out of the universal Idea. He has made the subject of the idea into a product and predicate of the Idea. He does not

⁴⁰⁶ Karl Marx, *Early Writings*. Vintage Books, New York, 1975, p.110 (O’Malley, p.49).

⁴⁰⁷ Karl Marx and Frederick Engels. *Collected Works* (3:166-167), quoted in Sensat, p.87.

develop his thought out of what is objective [*aus dem Gegenstand*], but what is objective **in accordance with a ready-made thought which has its origin in the abstract sphere of logic.**" (Marx, *Critique of Hegel's Philosophy of Right*, p.15, my emphasis)

"Hegel's true interest is not the philosophy of right but logic. The philosophical task is not the embodiment of thought in determinate political realities, but the evaporation of these realities in abstract thought...**Logic is not used to prove the nature of the state, but the state is used to prove the logic.**" (Marx, *Critique of Hegel's Philosophy of Right*, p.18, my emphasis)

Some of Marx's sharpest remarks are directed at Hegel's attempt to use speculative logic to "deduce" hereditary monarchy, for example.⁴⁰⁸ Hegel argues that the state can be an *ethical whole* (a *moral substance*), and be recognized as such, only if it is conscious of itself as a kind of an ethical subject, a person, as it were. This aspect of personality or individuality is embodied in the person of the monarch.⁴⁰⁹ Characteristically, Hegel rejects a merely pragmatic argument cited in support of hereditary succession to the throne – that this right of birth and inheritance prevents formation of competing factions when the throne falls vacant – on the basis that it "debases the monarch's majesty to the sphere of ratiocination" by appealing to considerations (such as utility or welfare of the people) that are *external* to the Idea.⁴¹⁰ After adding, reasonably enough, that pragmatic

⁴⁰⁸ Marx argues that the *Philosophy of Right* is based on a speculative reversal of the subject and predicate in the practical sphere. This reversal arises from giving the Idea the status of a subject, making the "real subjects", such as family, civil society, etc. into its mere moments. They are treated as derivative from the Idea and determined by it, rather than as centers of self-determining human activity. For Hegel, Marx observes, "[I]t is a question not of the political idea, but rather of **the abstract Idea in the political element....The sole interest here is that of recovering the Idea simply, the logical Idea in each element, be it that of the state or of nature; and the real subjects, as in this case the political constitution, become their mere names.**" (Karl Marx, *Critique of Hegel's Philosophy of Right*, p.11) Marx sees this inverted conception as a reflection of inverted reality in which individuals are, in fact, only the "playthings of alien powers".

⁴⁰⁹ Monarchy, Hegel writes, is "simple and therefore *immediate* individuality, so that the determination of *naturalness* is inherent in its very concept." (PhR §280)

⁴¹⁰ (PhR 281R).

considerations of this kind may as well be used to justify arrangements other than constitutional monarchy, Hegel concludes that for these reasons “philosophy alone is in a position to consider this majesty [of the monarch] by means of thought, for every method of enquiry other than the speculative method of the infinite and self-grounded *Idea* annuls the nature of majesty in and for itself”.⁴¹¹ It is natural at this point to wonder why we should embrace this majesty rather than doubt the method that requires it. Marx’s own assessment of Hegel’s “deduction” is resolutely harsh:

“Hegel has demonstrated that the monarch must be born, which no one doubted, but not that birth makes one a monarch. That man becomes monarch by birth can as little be made into a metaphysical truth as can the Immaculate Conception of Mary.” (*Critique of Hegel’s Philosophy of Right*, p.33)⁴¹²

Perhaps, however, Hegel’s “deduction” of hereditary monarchy is too easy a target. Be that as it may, and given the overall structure of Marx’s critique, we may say that both the organic systematicity and plausibility of Hegel’s account of Ethical Life as a system of realized freedom can be plausibly challenged even on its own terms. If this is correct (as it seems to be), his account is unlikely to be convincing as either a *uniquely necessary* way to specify the substantive ethical order, or, even more weakly, *the best* way to specify it. So, the ability of Hegel’s science of right to reconcile us to what is rational in our social world remains in doubt.

It may be tempting to retort that this problem is merely a matter of presentation – a better job of articulating a genuinely organic system of Ethical Life can be done, even if Hegel himself failed to do it properly. But, what confidence can we have in any

⁴¹¹ (PhR 281R).

⁴¹² Marx, *Critique of Hegel’s Philosophy of Right*, ed. J. O’Malley, p.33.

articulation of this kind? More importantly, why should practical philosophy aim at this kind of articulation in the first place?

In his discussion of Hegel's critique of Kant's moral philosophy, Karl Ameriks suggests that even if Hegel were to grant that considerable content is derivable from the categorical imperative (in the way Kant derives it in the *Metaphysics of Morals*), he could still plausibly argue that "an ethos, since it must exist precisely as a functioning guide, will remain more specific and more recognizable by people at large than a typical formal construction of duties devised by a Kantian". Yet, the crucial point, Ameriks stresses, is that "this superior concreteness can be a real advantage only if the content is *correct*."⁴¹³ What I hope to have shown is that Hegel can neither guarantee that the content of his theory is correct (that it fully integrates private and universal interests and harmoniously realizes personal, moral and political freedom) nor demonstrate that it is advantageous for his theory to attempt to capture the superior concreteness of ethos. The most concrete elements of Hegel's theory are generally put in place precisely to insure logical integration of various parts of his system. We have seen this in his account of the political role of corporations and of the need for hereditary monarchy, for example. Hegel's specifications of various aspects of estates (e.g., the need for primogeniture in land-owning families to ensure that the land-owning estate fulfills its political role in legislature), the roles of the police, and the like, play a similar role. Yet, these very elements are also precisely the ones that appear least justified and most problematic to an ordinary person who is supposed to find in Hegel's articulation of Ethical Life reason to identify with her own social world. The more fully a Hegelian theory attempts to

⁴¹³ Karl Ameriks, *Kant and the Fate of Autonomy*, pp. 313-314.

integrate various aspects of the ethical order into an organic whole, the harder it is to see how we can consider this organic whole as *actual* in our own social order, and as an expression of our freedom. It is, therefore, doubtful that superior concreteness can be a real advantage in a practical philosophy that aims to show that morality and ethics are not external to us, *even if* (for the sake of the argument) we suppose that the dialectical derivation of content is somehow beyond reproach.

In sum, Hegel's attempt speculatively to extrapolate an objective ethical order *a priori* in a way that fits his greater ambitions for complete philosophical systematicity becomes self-undermining. It appears to be at odds with the aim of philosophy as philosophy of reconciliation. Moreover, the same reasons that make it unsuccessful also suggest that any attempt to put practical life in a "diamond net" of metaphysics (or speculative logic) is, in principle, bound to fail. If this is right, a Hegelian "immanent" theory of duties is inherently problematic, and so is his criticism of Kant's moral philosophy as incapable of grounding an "immanent" theory of this kind.

Hegel's way of proceeding in articulating the objective ethical order is supposed to ensure that the resulting account captures the inner necessity belonging to and fully expressive of the *Idea* of right. This presupposes that the *Idea* of right is actual and, therefore, can be fully comprehended by following a proper philosophical method, which, as I have argued, Hegel models on Goethe's approach. But if we have significant doubts about the ability of any Hegelian articulation of Ethical Life to reconcile us to our social world, we may also reasonably doubt the *actuality* of the Idea of Right and of thought thinking itself, in general. If it is plausible that unlike that of natural kinds, reason's actuality is forever incomplete, as it were, we may doubt that the nature (the "archetypal

phenomenon”) of reason in any of its spheres can be fully comprehended and rationally reconstructed through Hegel’s philosophical version of Goethean “objective thinking”.

Chapter 6

The Ideal of the Highest Good and Objectivity of Moral Judgment

In the previous chapter, I argued that Hegel's approach does not, on the whole, result in a viable alternative to Kant's moral theory. Yet, Hegel's critique puts pressure on a certain straightforward reading of Kant's theory, according to which proper reasoning under the categorical imperative guarantees perfect moral objectivity – it tells us precisely what is objectively best to do in particular cases. In this chapter, I propose an alternative account which, I believe, better captures the notion of objectivity at work in Kant's moral philosophy. On this view, while we know what is *right* to do simply by reasoning under the categorical imperative, we come to know what is morally *best* to do only asymptotically through the collective deliberation and action of humanity through history.⁴¹⁴ One of the benefits of this account is that it suggests a new perspective on Kant's justificatory strategy in the *Critique of Practical Reason* and, in particular, on the role it assigns to one of the most controversial aspects of the *Critique* – the Dialectic of pure practical reason.

The Analytic of the *Critique of Practical Reason* is centered on the argument that the reality of pure practical reason and the validity of the moral law is proven through “the fact of reason” – our consciousness of the moral law as binding in all our practical thought and judgment. Yet, the role of this proof in justification of the moral law is not

⁴¹⁴ This account is suggested, in part, by the understanding of Kant's conception of the proper method and form of a philosophical science developed in the first two chapters. On this understanding, just as Newtonian science begins with *a priori* (largely mathematical) principles and then gradually "comes down to" particular concrete physics, so too Kantian moral philosophy begins with the idea of a moral law and general *a priori* moral principles that then gradually translate into a system of particular requirements.

obvious. One may question, for example, what it really shows about the objective validity of the moral law, given that on a widely shared interpretation, the moral law is authenticated – it receives a justifying “credential” – in virtue of its serving as a basis for the deduction of freedom. On John Rawls’s influential reading, for example, Kant pursues a novel coherentist approach to justification of morality that takes the place of a deduction. That is, pure practical reason and the moral law are first authenticated by the fact of reason, and then, in turn, by that fact’s authenticating the objective *practical* reality of the ideas of freedom, God, and immortality, establishing pure practical reason’s (and the moral law’s) legitimate role in the constitution of reason as a whole⁴¹⁵. This justificatory path, however, leads through the practical Dialectic, providing a “guarantee”⁴¹⁶ of the unity of pure reason as a whole and of the objective validity of its parts as having a legitimate role within its constitution.

Here, a problem begins to emerge. For, when combined with skepticism about the theory of rational faith developed in the Dialectic, this reading (which I take to be generally correct) leads to questions about Kant’s ability to justify the objective reality of the moral law in a coherentist manner. In particular, if the idea of the highest good – an ideal world in which complete morality of its members (moral good) is the ground of their complete happiness (natural good) – cannot be justified within Kant’s critical philosophy, then the objective reality of pure practical reason and of the moral law itself seems to be threatened.

I will take up some of these concerns by considering the relation between the idea of the moral law and the concept of the highest good. My aim is to examine what this

⁴¹⁵ John Rawls, *Lectures on the History of Moral Philosophy*, Harvard University Press, 2003, pp.267-268.

⁴¹⁶ (KpV 5:10).

relation implies about the objective validity and content of particular moral requirements and ordinary morally-guided practical judgments.

I begin with some background on what Kant means by the realized kingdom of ends, the ideal of the highest good, and the duty to promote it. I then consider implications the supposed incoherence of the duty to promote the highest good would have for Kant's ability to authenticate the moral law. Finally, I offer an account of the role of the highest good as a regulative ideal that guides the translation of the *a priori* moral principles into a system of particular moral requirements. The duty to promote the highest good, I argue, introduces collective duties into Kant's ethics. It is a duty gradually to develop social structures and institutions that embody and administer shared moral laws, making *a priori* moral duties more determinate through practice; perfecting them, so to speak, (for example, specifying a shared conception of what a duty of beneficence requires of each individual and of the community collectively in particular cases, and the like). I put this point in terms of the collective task of making objective the system of particular moral principles and practical judgments. The *objectivity of the content* of our practical thought develops as the background conditions against which we deliberate become progressively more inter-subjectively justifiable. And this is possible only through co-deliberation and collective action demanded in the duty to make morality fully efficacious in our shared social world, that is, in the duty to promote the highest good.

1. The Kingdom of Ends, the Highest Good and why we have a duty to promote it.

In the *Groundwork*, Kant presents the categorical imperative as the fundamental law of moral Nature, of "a systematic union of rational beings through common objective

laws, that is, a kingdom, which can be called a kingdom of ends”.⁴¹⁷ Morality, says Kant, consists in all actions referring to the lawgiving through which alone this kingdom can be brought about⁴¹⁸. Similarly, in the *Critique of Practical Reason*, he describes the idea of the moral law as a fundamental principle of a rational nature, to which we give objective *practical* reality by regarding it as an object of our will:

“This law must be the idea of a natural system [nature] not given in experience, and yet possible through freedom; a system, therefore, which is supersensible, and to which we give objective reality, at least in a practical point of view, since we look on it as an object of our will as pure rational beings.” (KpV 5:44, my emphasis)

Although Kant never makes this fully explicit, given our nature, which is both *rational* and *sensible*, and the character of our cognitive capacities, we must conceive of the idea of a kingdom of ends *realized* in nature as the ideal of the highest good. I will first briefly outline some reasons for this claim and then consider how Kant thinks of the highest good and why we have a duty to promote it.

1.1

It is often argued that Kant’s idea of a kingdom of ends and his idea of the highest good are two quite disconnected concepts. While the idea of the kingdom of ends is seen as central to Kant’s conception of morality, many Kantians argue that Kant has no basis for claiming that we have a duty to promote the highest good. John Rawls, for example, rejects the idea of the highest good as containing pre-critical elements borrowed from rationalist theology.⁴¹⁹ Moreover, he argues that this idea is incompatible with Kant’s

⁴¹⁷ (G 4:433).

⁴¹⁸ (G 4:434).

⁴¹⁹ John Rawls, *Lectures on the History of Moral Philosophy*, pp.313-317. Indeed, Rawls suggests that the basis of Kant’s conception of the highest good lies in his idea of God as possessor of impartial reason and holy will. Kant unconsciously derives the requirement of proportionality between morality and virtue in the

moral constructivism because there is nothing in the Categorical Imperative procedure that can generate a requirement for us to distribute happiness in proportion to virtue. Not only is it not our business to try to estimate the moral worthiness of others, but we also don't have the knowledge of the true motives of human beings to even start testing a possible principle of this kind. Similarly, Lewis White Beck objects that a duty to seek the realization of the highest good simply does not exist based on Kant's account of morality⁴²⁰ since the highest good is not given to us as an end through the Categorical Imperative. But, as we will see, Kant does not claim that it is given directly through the Categorical Imperative; nor is a duty to promote the highest good concerned with our distributing happiness in proportion to virtue in Rawls's sense. Rather, the idea of the highest good represents the form a *realized moral world* must take *for us*.

The idea of a systematic connection between morality and happiness in the moral world is mostly implicit in the *Groundwork*. But, it becomes conspicuous when the focus of Kant's discussion in *Groundwork* II shifts from the possibility of *willing an action* that would promote realization of the kingdom of ends if it were completely within our power, to the *real* or "*natural*" *possibility* of its realization, when an agent considers what such a concept would entail for all members of the social world as well as what external natural factors must be present. A kingdom of ends, says Kant,

“would actually come into existence through maxims whose rule the categorical imperative prescribes to all rational beings *if they were universally followed*. It is true that, even though a rational being scrupulously follows this maxim himself, he cannot for that reason count upon every other to be faithful to **the same maxim** nor can he count upon **the kingdom of nature and its purposive order to harmonize with him**, as a fitting member, toward a kingdom of ends possible

concept of the highest good from the idea that “subject to virtue, as constraint, God as dispenser maximizes happiness” (p.316).

⁴²⁰ L.W.Beck, *Commentary on Kant's Critique of Practical Reason*, The University of Chicago Press, 1958, pp. 243-245.

through himself, that is, upon its **favoring his expectation of happiness...**" (G 4:438, my emphasis)

Here, Kant connects membership in the realized kingdom of ends not only with universal compliance with moral maxims, but also with an expectation of happiness, which would be satisfied if nature were to *harmonize* with agents' moral efforts, that is, if their morally-grounded ends were realizable. This implies that a certain harmony, even a necessary connection, between agents' virtue and their happiness is already included in the idea of the realized kingdom of ends, as Kant conceives it in the *Groundwork*.

Consider two further observations. First, the above passage is usually read as telling us that an individual agent cannot count on others acting morally, even if she herself does. Although this may be true, I think Kant is making a stronger and more important point – an agent cannot count on her independently constructed moral maxims to be fully compatible with those of others, that is, she cannot expect that all rational agents would follow **the very same maxims**, even if they all reason under the categorical imperative. In my view, this reading fits better not only with the actual language of this passage, but also with what Kant tells us about the ethical community throughout his critical corpus. For example, a similar idea is expressed in his discussion of the ideal moral world in the first *Critique*:

“in the moral world, in the concept of which we have abstracted from all hindrances to morality...this system of self-rewarding morality is only an idea, the realization of which rests on the condition ...that all actions of rational beings occur **as if they arose from a highest will that comprehends all private choice in or under itself.**" (KrV A810/B838, my emphasis)

I take the idea of the will that “comprehends all private choice in or under itself” analogically to represent a unifying principle that ensures a systematic unity of particular moral laws and ends adopted by individual agents. In the much later *Religion*, Kant argues, in a similar vein, that until moral laws become publicly established as shared laws

of the universal moral community, “*even with the good will of each individual*, because of the lack of a principle that unites them”⁴²¹, agents remain in an “ethical state of nature” in which each individual prescribes laws to himself – a condition that humanity has a moral duty to overcome.

The second brief observation is that an individual agent cannot count on nature harmonizing with his expectation of happiness even if he conceives of the kingdom of ends as fully in his (or humanity’s) power.⁴²²

Thus, in order for us to hold the kingdom of ends as actually realizable, we must believe that individual morally-grounded systems of maxims can converge over time into a single system and that nature will cooperate in the realization of ends these maxims contain. Moreover, both ideas seem to come together when only a few lines down from the passage we are considering Kant adds that the kingdom of ends would “**no longer remain a mere idea but would obtain true reality**,” just in case “**the kingdom of nature as well as the kingdom of ends were thought as united under one sovereign**”.⁴²³ Here again, the union of the kingdom of nature and the kingdom of ends under one sovereign represents the idea that morality, in order to be fully efficacious, as pure practical reason demands, requires that we posit the necessary *systematic connection* between these two heterogeneous realms. The objective reality of the kingdom of ends is grounded in the systematic connection between moral and natural ends, the system of freedom and the system of nature. The concept of this connection (with an explicit

⁴²¹ (Rel 6:97).

⁴²² Kant makes this point in both the first and the second *Critique*. He says, for example: “rational beings stand under the moral law but cannot expect any successes for their conduct except in accordance with the course of nature in our sensible world.” (KrV A812/B840)

⁴²³ (G 4:439).

element of proportionality), however, is what structures the idea of the highest good, which, in the *Critique of Practical Reason*, Kant claims, follows out of the moral law.

By conceiving of the realized kingdom of ends in this way we necessarily connect it with theoretical reason's inherent interest in seeking unity in nature. It is in the interest of theoretical reason to conceive of happiness, as a natural end of every human being, in a systematic manner. However, as Kant notes in the first *Critique*, happiness in itself does not constitute a system since it is contingent on external conditions as well as particular needs and inclinations. It is determined differently by each individual, but indeterminate as a universal concept.⁴²⁴ ⁴²⁵ It follows that in order to give practical meaning to the idea of the natural world shaped by moral laws, the world in which desires and inclinations can be ordered and unified, it is necessary to think of happiness being "proportioned" to morality in a way we can accept as reasonable. How are we to understand this proportionality?

1.2

If we take the realized kingdom of ends, or the highest good, to be a social world in which everyone is completely moral and completely happy, the proportionality between virtue and happiness appears trivial. Yet, while such a world is an ideal of reason, it is not a static snapshot, but a dynamic, living moral world, in which individual happiness must

⁴²⁴ Kant writes, for example, "The principle of happiness can indeed furnish maxims, but never such as would be for laws of the will, even if universal *happiness* were made the object. For, because cognition of this rests on sheer data of experience, each judgment about it depending very much upon the opinion of each which is itself changeable, it can indeed give *general* rules but never *universal* rules, that is, it can give the rules that on average are most often correct but not rules that must hold always and necessarily...and so it refers to and is based upon experience, and then the variety of judgment must be endless. This principle, therefore, does not prescribe the very same practical rules to all rational beings, even though the rules come under a common heading, namely that of happiness" (KpV 5:36) See also: "For whereas elsewhere a universal law of nature makes everything harmonious, here, if one wanted to give the maxim the universality of a law, the most extreme opposite of harmony would follow" (KpV 5:26)

⁴²⁵ For Kant, "Morality in itself constitutes a system, but happiness does not, except insofar as it is distributed precisely in accordance with morality." (KrV A811/B839)

be achieved, to a large degree, through the agent's own actions. Indeed, Kant conceives happiness not merely as a state of physical well-being and of moral contentment, but also as an activity, as striving towards a certain ideal condition.⁴²⁶ In the *Lectures on Philosophical Theology*, he describes it as follows:

“Fundamentally, we cannot even frame a correct concept of happiness to ourselves except by thinking of it as a progress toward contentment....it is labor, difficulty, effort, the prospect of tranquility, and the striving toward the achievement of this idea which is happiness for us.” (LPT, p.119)

Note also that since an agent can judge the strength of his moral disposition only by the difficulty of obstacles he meets, true moral satisfaction is possible only through actions the agent himself takes to overcome them.

In a realized moral world, says Kant, “a system of happiness proportionately combined with morality can also be thought as necessary”⁴²⁷ *because* freedom governed by the moral law will itself be a *cause* of general happiness. The proportionality Kant has in mind here can then be taken to refer to a relation between the work that has been put forward and the degree to which the sought after ends are attained. If we think of the human race in general as working towards a common end – an ideal moral world realized

⁴²⁶ See (KpV 5:61). But, is this kind of proportionality approximated in the natural moral world a completely coherent idea? Consider, for example, two individuals– let's call them agent X and agent Y. Both are completely moral and both are working with the same vigor towards an attainment of their goals, yet agent X encounters difficult moral challenges, while agent Y does not. As a result, some of the interests of agent X are not satisfied. In what sense then does the proportionality between morality and happiness hold in this world? Kant's account suggests that the lack of physical satisfaction of agent X's interests would be in a certain sense counterbalanced by moral happiness resulting from his confidence in the “reality and constancy”(Rel, 6:67) of his moral disposition. It is important to note, however, that moral satisfaction cannot be viewed as a substitute for physical well-being, but rather only as an important aspect of the overall happiness of a human being. Another way this question may be answered is the following: Kant claims that one of our fundamental duties is to promote the happiness of others. So in a moral world where everyone has a completely good will, if an individual seemed to strive to an extent that was way out of proportion to the happiness he was achieving, others would have a moral duty to expend special effort at promoting his happiness. In this way, this individual's happiness would be brought into proportion with his completely moral disposition. While it seems to require others to have knowledge of his moral disposition, this does not present a problem for this Kantian answer since Kant thinks we can have rational faith that, as a member of the moral world, this individual is motivated by moral reasons.

⁴²⁷ (KrV A810/B838).

in nature – we can think of it being closer to its goal in proportion to the work humanity exerts to bring it about. As Kant remarks in the *Idea for a Universal History*, humanity can achieve happiness *to the degree to which* it works itself up “from the uttermost barbarism to the highest degree of skill, to inner perfection in [the] manner of thought”.⁴²⁸

So far, I have argued that the systematic connection and proportionality between morality and happiness is not newly introduced with the idea of the highest good in the *Critique of Practical Reason*. Rather, it is already included in the concept of the kingdom of ends realized in nature present in the *Groundwork* and merely becomes more prominent in Kant’s discussion of the highest good in the second *Critique*. It is also worth noting that starting with the ideal of the kingdom of ends, constructed by reason as a representation of the moral law as a law of autonomy, and only then connecting its realization with the idea of the highest good is a natural path to take, given the emphasis on the priority of right over good in Kant’s moral theory.⁴²⁹

1.3

The *Critique of Practical Reason* aims to prove that *a priori* practical principles and concepts have *objective practical reality*, that they can *on their own* determine our sensibly-affected will. But insofar as they determine the will of a being that must set ends and act in the natural world, the resulting determinations will always have a reference to actions and ends as objects of experience. The idea of a moral world has *objective practical reality* in this sense:

⁴²⁸ (IUH 8:20).

⁴²⁹ “the highest good ...an object which can much later – when the moral law has first been established by itself and justified as the immediate determining ground of the will – be represented as object to the will, now determined *a priori* in its form; and this we will undertake in the Dialectic of pure practical reason.” (KpV 5:64)

“The idea of a moral world has, therefore, **objective reality**, not as referring to an object of intelligible intuition ...**but to the world of sense** – conceived, however, as an object of pure reason in its practical use....” (KrV A808/B836)

Because we are not pure rational beings, but rational beings in the order of nature, the object of our will has to be the fully morally structured *natural* social world. The idea of the highest good represents morality as fully efficacious in the natural world, as something that can be cognized *in experience*, “so far as experience, by exhibiting the effects of morality in its ends, gives **an objective, although only practical, reality** to the concept of morality [*Sittlichkeit*] as having causality in the world”.⁴³⁰

Kant claims that we have a duty to promote the highest good. Although this idea cannot be derived from the moral law analytically, it follows synthetically when we consider the way the moral law operates in finite rational beings whose practical reason has an “inescapable limitation” to be concerned with the actual results or realization of ends set in every action. Our practical reason is practical because it relates to its object in such a way as to make it actual.⁴³¹ Pure practical reason must be able to determine the will to effect objects of its representations and it expects to have effect in experience. As Kant puts it, our reason “**makes its own order according to ideas**, ... according to which it even declares actions to be necessary that yet have not occurred and perhaps will never occur, nevertheless **presupposing** of all such actions that reason could have causality to them; for without that, it would not expect its ideas to have effects in experience”.⁴³²

⁴³⁰ (Rel 6:7fn).

⁴³¹ (KrV b ix-x; cf. KpV 46, 89).

⁴³² (KrV A547-9/B575-7, my emphasis).

The moral will wills the world in which an individual's freedom, including her morally guided choice of particular ends that fall under her conception of happiness, is in complete systematic unity with everyone else's freedom under the moral law. Willing this moral world, therefore, implies willing the realization of the system of all good ends. It also presupposes that this realization is possible, since it is a demand of practical reason that it be an efficient cause in the world. To put this another way, the moral will must will its full exercise in the sensible world (complete virtue), which includes willing the effectiveness of this exercise (complete realization of all good ends, that is happiness consequent on morality). That is, the moral will must will the world in which universal happiness is collectively (rather than distributively, as Rawls suggests, for example) consequent on the morality of its members.

1.4

So, the highest good is the object of pure practical reason for the sensible rational being, and, as such, must be really possible. The leading question in the Dialectic of the second *Critique* is: *how is the highest good practically possible?* An attempt to answer it, Kant argues, inevitably leads to an apparent practical antinomy. The connection between morality and happiness in the idea of the highest good is a *synthetic* combination. The apparent incoherence in our practical reason arises when we judge that, despite our duty to promote the highest good, the *necessary* connection included in its concept cannot be expected in the world of sense “even from the most meticulous observance of moral laws”.⁴³³ The most we can expect from Nature is an occasional and contingent agreement between the morality of an agent and his fortune, but never an agreement according to necessary rules. And yet, the practical possibility of the highest good is necessary if the

⁴³³ (KpV 5:114).

moral law that commands its realization is not to be considered “a phantom of the brain”. Hence, the antinomy.⁴³⁴

The antinomy represents a putative fault line between theoretical and practical reason. While pure practical reason requires a positive answer to the question of the possibility of the highest good, theoretical reason, whose task it is to estimate “whether the causality of

⁴³⁴ Kant intends the practical antinomy and its resolution to parallel the structure of his discussion of the theoretical antinomy of freedom in the *Critique of Pure Reason*. Yet, his presentation of the practical antinomy in the second *Critique* is much less rigorous and allows for varying interpretations. While some Kant readers (Andrews Reath, Christine Korsgaard, Allen Wood) see the antinomy as a conflict of practical commitments, others (Lewis White Beck, Yirmiyahu Yovel) treat it as a conflict of theoretical judgments that arises in a practical context.

On the one hand, the practical antinomy can be viewed as a conflict between a practical commitment that follows from the moral law – a commitment to promote the highest good – and a commitment that issues from “a rule of expediency” or prudence, a norm of practical rationality that says that “I ought not to attempt the impracticable” (*Theory and Practice*, 8:309; KPW, p.89). In other words, if from a theoretical point of view I must judge the highest good to be unattainable (impossible or impracticable) then the rule of expediency tells me that I ought not to promote it. Yet, morality demands that I promote it. In a similar vein, we can think of the practical antinomy as a contradiction within our practical self-consciousness – a contradiction between our consciousness of being bound by the moral law and our consciousness of the impossibility of being so bound with respect to its *a priori* object. It is important to recognize, however, that the practical antinomy arises only on the presupposition that theoretical reason must judge the highest good impossible – it arises only because of the contribution theoretical reason makes to our practical judgment. If the practical use of reason did not have to be reconciled with its theoretical use, there would not be a conflict within the practical.

On the other hand, it is not unreasonable to unpack Kant’s account of the practical antinomy in terms of a conflict of theoretical claims. The merit of this reading is that it allows us to see the practical antinomy as closely parallel to the antinomy of freedom, as Kant suggests it is. In particular, this reading is able to represent both the thesis and antithesis as true from a certain point of view:

Thesis: the highest good is possible	Antithesis: the highest good is not possible
<p>Proof: Suppose that the highest good is not possible. But, the moral law requires us to promote the highest good and obligation implies possibility – <i>ultra posse nemo obligatur</i>. Given the supposition, the moral law must be directed at an imaginary end and therefore lack objective reality, at least with respect to the command to promote the highest good. Yet, the moral law is established as unconditionally valid through the fact of reason (valid with regard to all its commands). So, we arrive at the contradiction and our initial supposition must be false. Thus, the highest good must be possible.</p>	<p>Proof: Suppose that the highest good is possible. It is possible either if happiness is a ground of a virtuous disposition or if a virtuous disposition is an efficient cause of happiness. The Analytic proved that the first option is false. And, theoretical investigation into the possibility of the highest good shows no necessary connection between the goodness of the will and practical effects in the sensible world. Thus, the second option is false as well, and the highest good is not possible.</p>

The plausibility of both interpretations is quite telling. It highlights the fact that the practical antinomy cannot be comfortably placed on either the practical or the theoretical side.

the will is adequate for the reality of the objects,”⁴³⁵ seems to require a negative one. Consequently, Kant’s resolution of the antinomy (the details of which I have to omit here)⁴³⁶ is intended to show that the two parts of reason can be brought together into a self-subsisting whole. It is a sort of consistency proof for pure practical reason and for the faculty of reason as a whole, showing that a systematic unity of pure reason is possible.

This brings me to two questions that are the main target of this paper. First, as we have seen, the idea of the highest good plays a key role in Kant’s argument for the unity of reason. Yet, if this idea is indeed a dogmatic remnant and the duty to promote the highest good is to be rejected, as is often argued, then what implications does this have for Kant’s ability to authenticate the moral law, particularly if Kant’s justificatory strategy is coherentist? More generally, what is the relation between the possibility of the highest good and the objective validity of the moral law?

The second question follows on the first. Does the duty to promote the highest good, supposing it to be legitimate, have any role in guiding action? Does it add anything to our practical knowledge, given that it is the categorical imperative that tells us what we ought to do and how we ought to live? The problem is how to reconcile the idea that the moral

⁴³⁵ (KpV 5:45).

⁴³⁶ Kant approaches the resolution of the practical antinomy in the same way he approaches the antinomies of speculative reason – by appealing to transcendental idealism. The conflict, he argues, is merely apparent and is based on taking the relation between appearances as a relation of things in themselves to appearances. If we consider ourselves from a practical point of view (in terms of our capacity to govern our will by the moral law) we can *at least think* of the real possibility of a *necessary* connection between the morality of our disposition as a rational cause and happiness as its effect in the sensible world and, therefore, can postulate the realization of the highest good as achievable, at least in the ideal limit. It is worth noting that in the resolution to the practical antinomy, Kant suggests that not only is it possible to think of this necessary connection, we can even give a certain determination to this idea by reflecting on the fact that consciousness of virtue produces an analog of happiness in us, namely the intellectual contentment or satisfaction with our existence, which is consciousness of “needing nothing”. Consciousness of virtue, or of freedom in the commitment to the moral law, is the *sole* source of this unchangeable contentment (KpV 5:117-118). Kant does not intend this discussion of the connection between our consciousness of virtue and contentment to be a complete explanation of the necessary connection constitutive of the idea of the highest good. Rather, he seems merely to illustrate that such a connection is not unthinkable. He offers a counter-example of sorts to an opponent who subscribes to the Antithesis part of the antinomy.

law immediately directs our power of choice with the demand that we must *also* somehow orient, or regulate, our actions by promoting the highest good.

I will take up these questions one at a time in the two sections that follow.

2. The Objective Reality of the Moral Law and the Possibility of the Highest Good.

According to the argument of the Analytic, our consciousness of the moral law as supremely authoritative in our practical thought and judgment and the reality of the moral law itself – is “the fact of reason” [*Factum* der Vernunft].⁴³⁷ Kant’s use of the Latinate *Factum* (which signifies a deed or activity) is intended to capture the idea that original law-giving is something our pure practical reason *does* by its very nature; the fact of reason is an activity of reason itself and our consciousness of our active rational nature.⁴³⁸ The moral law, established through this fact, then serves as a basis for the “deduction” of freedom – a practical argument intended to show that we are justified in postulating our freedom on the basis of our consciousness of the reality of the moral law.

⁴³⁷ Kant describes the fact of reason in somewhat different ways over a number of well-known passages throughout the text in addition to allusions to it in other works. The relevant passages in *the Critique of Practical Reason* are (KpV 5:6; 5:31; 5:42; 5:43; 5:47-48; 5:55; 5:91; 5:104).

⁴³⁸ There is a well-known disagreement among Kant scholars on how to understand “the fact of reason”. Consideration and assessment of different interpretations of the ‘*Factum*’ would, however, take me too far afield, given the purposes of this chapter, and I have to leave it for another occasion. Here, I simply outline the reading I find most philosophically convincing and true to the letter and spirit of Kant’s text. For readings that understand “the fact of reason” as an “act” or a “deed” see, for example, Willaschek, Marcus. “Die Tat der Vernunft: Zur Bedeutung der Kantischen These vom ‘Factum der Vernunft’”; Franks, Paul. “Freedom, Tatsache and Tathandlung in the Development of Fichte’s Jena Wissenschaftslehre,” and *All or Nothing: Systematicity, Transcendental Arguments, and Skepticism in German Idealism*; Engstrom, Stephen. “Introduction”. In *Critique of Practical Reason*, trans. Werner S Pluhar. pp.xl –xliii; Sussman, David. “From Deduction to Deed: Kant’s Grounding of the Moral Law”. For alternative readings that stress the importance of legal metaphor in understanding the nature and meaning of “the fact of reason”, see, for example, Henrich, Dieter. “Der Begriff der sittlichen Einsicht und Kants Lehre vom Faktum der Vernunft” and Proops, Ian. “Kant’s Legal Metaphor and the Nature of a Deduction”. For another interpretative proposal that emphasizes the meaning of Kant’s ‘*Factum*’ as the *result* of an activity of reason, see Kleingeld, Pauline. “Moral Consciousness and the ‘Fact of Reason’”.

Now, one of the puzzling aspects of Kant's discussion of the practical Antinomy in the concept of the highest good is that it seems to tie the objective validity of the moral law directly to the possibility of this object:

“[S]ince the promotion of the Highest Good...is an *a priori* necessary object of our will and inseparably bound up with the moral law, the impossibility of the first must also prove the falsity of the second. If, therefore, the highest good is impossible in accordance with practical rules, then the moral law, which commands us to promote it, must be fantastic and directed to empty imaginary ends and must therefore itself be false.” (KpV 5:114)⁴³⁹

And after the resolution of the antinomy, Kant adds:

“Thus, despite this seeming conflict of a practical reason with itself, the highest good is the necessary supreme end of a morally determined will and is a true object of that will; for it is practically possible, and **the maxims of such a will, which refer to it with regard their matter, have objective reality**, which **at first was threatened** by the antinomy that appeared in the combination of morality with happiness in accordance with a universal law” (KpV 5:115)

Although on the coherentist reading, if it is to be fully consistent, there must be some relation between the possibility of the highest good and the final authentication of the moral law, it is still surprising that the moral law, which in the Analytic of the *Critique* was supposed to be “firmly established of itself,”⁴⁴⁰ could now be possibly considered false. So what can Kant mean by this?

2.1

⁴³⁹ “Reason sees itself as compelled either to assume [the Highest Good, and whatever this idea presupposes]... or else to regard moral laws as empty figments of the brain, since without that presupposition their necessary success, which the same reason connects with them, would have to disappear...For they do not fulfill in its completeness that end which is natural to every rational being and which is determined *a priori*, and rendered necessary, by that same pure reason.” (KrV A812/B840 – A813/B841) But also, “[I]t is not meant to say that it is just as necessary to assume the existence of God as it is to acknowledge the validity of the moral law, hence whoever cannot convince himself of the former can judge himself to be free from the obligations of the latter. No! ... Every rational being would still have to recognize himself as forever strictly bound to the precept of morals; for its laws are formal and command unconditionally, without regard to ends (as the matter of the will). (KU 5:450-451)

⁴⁴⁰ (KpV 5:47).

Kant cannot be suggesting, I think, that the Dialectic raises doubts about the objective reality of pure practical reason since the reality of its law as the *formal* principle binding our will and directly determining practical judgment is established through the fact of reason. But, Kant thinks of truth as an agreement of cognition with its object and as concerning the content or *matter* of cognition, not just its *form*.⁴⁴¹ It then seems that in claiming that the moral law would be false, if its object were impossible, Kant is suggesting that in order for the *matter* of morality to be true, that is, for outcomes of our moral reasoning (our particular ends and judgments) to have *fully objective content*, it must be possible for us to will this object. Let me consider this idea more closely.

An objective end, according to Kant, is an end that we ought to have, “an end that is assigned to us as such by reason alone” and an ultimate end is the end that “contains the inescapable but also a sufficient condition of all other ends”.⁴⁴² One’s own happiness is a *subjective* ultimate end – an end we all *do have* by nature. The highest good is an *objective* ultimate end – an end we *ought* to have; the end that unifies all objective ends and those falling under the idea of happiness conditioned on morality.

The moral law determines judgment in a way that *makes it possible* for an agent’s actions to harmonize with morally-grounded actions of others. Since every maxim refers to an end, the moral law makes it *possible* for the end of every morally-determined maxim to harmonize (negatively as not hindering or positively as promoting) with, and have a reference to, the whole of the highest good. This is also a way to understand

⁴⁴¹ On Kant’s nominal definition of truth and the argument against the possibility of a general criterion of truth see (KrV A58-9/B82-3) and also Kant’s discussion of the material and formal criteria of truth in the *Jäsche Logic* (JL 9:50-53). In the *Jäsche Logic*, Kant remarks, for example, that the formal universal criteria of truth given by general logic “are of course not sufficient for objective truth, but they are nonetheless to be regarded as its *conditio sine qua non*.” (JL 9:51)

⁴⁴² (Rel 6:7fn).

Kant's idea that morality consists in all actions referring to the lawgiving through which alone a kingdom of ends is possible.⁴⁴³

It is then plausible to say that we can think of a particular *subjective* end (and a corresponding principle) as *objectively good* only if, and *to the degree to which*, it harmonizes with this ideal order of ends in nature. The idea is supported, in my view, by Kant's pointing out in *Religion* that harmonizing with this end provides “**a special point of reference** for the unification of all ends” because the highest good is “the idea of an object that unites within itself the formal condition of all such ends as we ought to have (duty) with everything which is conditional upon ends we have and which conforms to duty”.⁴⁴⁴

Insofar as pure reason has the capacity to determine the sensibly-affected will, these determinations are maxims that refer to ends that must be really possible or, at least, not *impossible* (as in the practical antinomy), since that is exactly what would undermine the objective reality of morality as having causality in the world. Morality requires that “**an objective practical reality** be given to the combination, which we simply cannot do without, of the purposiveness [deriving] from freedom and the purposiveness of nature” (Rel 6:5), that is, that we work towards the realization of this combination. If the highest good were impossible, then our morally-grounded maxims and ends (which must harmonize with and refer to the *complete* system of such maxims and ends) could not be *collectively* realizable. So insofar as their ability to harmonize into a systematic whole certifies the objectivity of their content, the objectivity of the ends we set through our moral maxims, would be undermined. This, in turn, would have the consequence of

⁴⁴³ (G 4:434).

⁴⁴⁴ (Rel 6:5).

creating a disincentive to *treating* them *as* universal laws⁴⁴⁵, issuing from a norm of practical rationality that says that “I ought not to attempt the impracticable.”⁴⁴⁶

Then the answer to the question “What is the relation between the possibility of the highest good and the objective validity of the moral law?” can be summed up this way. Particular “subjective” ends we have can be considered objectively good *only if* and *to the degree to which* they sustain or contribute to humanity’s progress towards the realization of the moral order in nature. Moreover, if the highest good were impossible, we would still be conscious of being unconditionally bound by the moral law, as a formal principle. But in our moral judgments we would be bound to ends, the objectivity of which our reason could not certify. And therefore, the objective practical reality of our particular moral judgments could not be certified either.

2.2

But what exactly does harmonizing with a realized kingdom of ends or with the highest good mean? First of all, as Kant argues in the *Groundwork*, this means that willing one’s maxim as a universal law should at least not contradict and should perhaps promote objective ends of rational agency, such as one’s own perfection and the happiness of others. But these ends themselves, just as an idea of the kingdom of ends and the ideal of the highest good, are very general principles that cannot be fully determined *a priori*. So the question remains: What does harmonizing with these ends mean? Either the idea of this harmonizing is empty (and then the question of the objective validity of the moral law may be raised) or it has to be conceived in a way that

⁴⁴⁵ “a hindrance to moral resolve”. See *Religion* (Rel 6:5).

⁴⁴⁶ See *Theory and Practice* (TP, 8:309). As Kant points out in *Theory and Practice*, the necessity to strive towards the highest good “is not the necessity created by a lack of moral incentives, but by a lack of external circumstances within which an object appropriate to these incentives can alone be produced as an end in itself, as an *ultimate moral end*.” (TP 8:279)

allows us to think of the harmony (and, therefore, of the objectivity of our system of morally determined ends and maxims) as continuously developing over time, converging on the system of principles and ends that fully embodies morality. The latter, I believe, is where Kant's thought leads us. This brings me to the question of what practical role the ideal of the highest good may have in Kant's system of morals, given that the categorical imperative is the fundamental principle that guides all action and does so unconditionally, without reference to any ends.

3. The Highest Good as the Regulative Principle of Practical Reason.

Realizing the highest good requires more than each individual's independent effort to be virtuous. It requires collective action to develop background conditions under which individual judgment can progressively better harmonize with this ideal. The categorical imperative, as a formal principle, does not on its own ensure that our practical principles will actually cohere, or converge, into a unified system⁴⁴⁷, just as pure principles of the understanding do not, on their own, ensure that specific empirical laws will fit into a complete system of scientific knowledge. In Kant's theory, such a system is demanded and made possible by regulative principles of reason.

As Kant points out in the *Metaphysics of Morals*, ethics necessarily falls into casuistry and "because of the latitude it allows in its imperfect duties, unavoidably leads to questions that call upon judgment to decide how a maxim is to be applied in particular

⁴⁴⁷ As Kant argues in the *Anthropology*, progress towards the highest good cannot be expected "by the free agreement of individuals," and is only possible "by a progressive organization held together by cosmopolitan bonds"(A 7:333). See also (Rel 6:97-98, 151).

cases”.⁴⁴⁸ A complete and fully *objective* system of ethical life can only be *approximated* through the progress of actual moral practice.⁴⁴⁹

My claim is that Kant’s moral theory contains elements of a genetic or developmental conception of the science of morals (the body of principles and ends that structure the moral life of the community of human beings) based on regulative principles of reason and that these elements are consistent with the fundamental role of the categorical imperative as an *a priori*, objective constitutive principle of practical thought.

3.1

The account I am proposing appeals to ideas that are mostly implicit in Kant’s thought, but I do not see it as revisionist. It may be helpful to note, however, a certain affinity between this proposal and the Marburg School’s Neo-Kantian theory of scientific knowledge, particularly as it was developed in the first half of the 20th century by Ernst Cassirer. Cassirer’s developmental or “genetic” conception of knowledge sought to replace Kant’s notion of theoretical synthetic *a priori* cognition (such as Euclidian geometry and Newtonian physics) as forever fixed. It argues that it is impossible to determine the specific content of ultimate principles and to have a completely objective system of scientific knowledge at any particular historical stage. A fully objective system of knowledge is ever more closely approximated through an infinite series of theories converging at the ideal limit on the “universal invariant theory of experience,” so that **“the “given” of the objects is transformed into the “task” of objectivity”**.⁴⁵⁰ Particular theories at prior stages of this progression are viewed as approximate special or limiting

⁴⁴⁸ (MdS 6:411).

⁴⁴⁹ Consider a related point about the complete system of right in the *Metaphysics of Morals* (MdS 6:205).

⁴⁵⁰ Ernst Cassirer, *The Logic of Cultural Sciences*, p.30.

cases of the final theory. These intermediate theories are, in a way, included in the final theory through a kind of backward inclusion. The *a priori* is re-conceived as “what is ultimately common to all possible forms of scientific experience” or those elements which from the perspective of the completed final theory would be “preserved in the progress from theory to theory, because they are the conditions of each and every theory”.⁴⁵¹ In addition, the idea of a necessary convergence of the process of continuous progress through revision underwrites the *objectivity of this entire developmental series* and also serves to constitute the “empirical correlate to which it corresponds” – the ideal limit structure to which the series is converging.⁴⁵²

The parallel between my proposal and Cassirer’s theory is limited, however, to the understanding of the role of regulative principles in securing the *objective content* of actual moral practices and judgments and does not extend to the treatment of the synthetic *a priori*. For Kant, theoretical regulative principles of reason specify the rules for seeking unity, systematicity, and completeness in our knowledge of the world; they orient general practices and individual power of judgment by requiring integration of concepts and principles under the ideal of systematic unity, making possible unitary experience and scientific inquiry.⁴⁵³ This is what gives these regulative principles their independent normative force. Yet, regulative principles guide the use of the

⁴⁵¹ Ernst Cassirer, *Substance and Function*, p.269.

⁴⁵² See, for example, Michael Friedman, *The Davos Disputation and Twentieth Century Philosophy* in “Symbolic forms and cultural studies: Ernst Cassirer's theory of culture” edited by Cyrus Hamlin, John Michael Krois, p.235. Also, as Friedman remarks, “[Cassirer] proposes a generalized Kantian conception, emblematic of what he himself calls “modern philosophical idealism,” according to which scientific rationality and objectivity are secured in virtue of the way in which our empirical knowledge of nature is framed, and thereby made possible, by a continuously evolving sequence of abstract mathematical structures.” (Michael Friedman, *Ernst Cassirer and Thomas Kuhn: The Neo-Kantian Tradition in History and Philosophy of Science*, p.246)

⁴⁵³ Without such principles, “we would have absolutely no reason, but without this no coherent employment of the understanding, and in the absence of this no sufficient mark of empirical truth.” (KrV A561/B679).

understanding within a constitutive framework of pure principles of the understanding that first make objective judgment possible. In Cassirer's account, constitutive principles lose their Kantian absoluteness and become dependent on the use of regulative ideals – they are re-defined as those principles that would be recognized, retrospectively, as it were, as “preserved in the progress from theory to theory, because they are the conditions of each and every theory”.

The latter, of course, is not Kant's view. But, I think something similar to this idea can be applied, consistently with Kant's basic commitments in moral philosophy, to Kant's theory of the transition from metaphysical first principles of morals to the system of ethics, and to his conception of the task morality sets for us – of bringing about a sensible world with the form of a world of the understanding. This is the idea that objectivity of the content of the system of practical knowledge develops through practice guided by regulative ideals, that despite all the socio-historical deviations, contingencies, and plurality of ways in which morality can be embodied in local systems of value, the objectivity of the content of particular moral requirements and of morally-guided judgment is secured by reason's demand that we promote the ideal of the highest good (and a corresponding belief that our social world is progressing towards this ideal).

As a *necessary* condition of objectivity of any practical judgment, the categorical imperative makes possible the moral development of a shared social world. The regulative principles that follow from the moral law guide this progress through the series of generations of human beings and practices that structure their life together by demanding its convergence towards an ideal endpoint. In its *constitutive* role, pure practical reason requires of each agent that the form of her maxims (*subjective* principles on which an agent acts) makes them fit to serve as *objective* principles valid for all

rational beings; that they *qualify* as universal laws. In its *regulative* role, pure practical reason regulates the use of practical judgment by demanding that agents collectively strive to create the conditions under which their maxims will fit into a single system of laws and practices so as to make everyone's morally grounded conception of happiness be realizable; that they set and pursue shared ends that make this possible. The duty to promote the highest good *is* this regulative principle. Its role with respect to practical judgment is parallel to the role of pure theoretical reason in guiding the use of the understanding towards "a certain *collective* unity as the goal ...at the prospect of which the lines of direction of all of its rules run together in a point," providing it "with the greatest unity together with the greatest extension".⁴⁵⁴

3.2

Indeed, Kant emphasizes that a duty to promote the highest good is different in kind and in principle from other moral duties. It differs *in kind* from duties of human beings towards human beings because it is a *collective* duty – a duty of humanity to itself. It is, in a sense, a duty of a community of human beings as it develops through history (rational beings in the order of nature) to itself as a community of human beings qua rational beings capable of pure will. This duty differs from other moral requirements *in principle* because it connects the idea of a moral law with the totality of its effects. It makes a regulative demand on the *collective use of practical judgment* aimed at the ideal that we must strive to approximate.⁴⁵⁵

⁴⁵⁴ (KrV A644/B672).

⁴⁵⁵ "Now, here we have a duty *sui generis*, not of human beings toward human beings but of the human race toward itself. For every species of rational beings is objectively—in the idea of reason—destined to a common end, namely the promotion of the highest good as a good common to all. But, since this highest moral good will not be brought about solely through the striving of one individual person for his own moral perfection but requires rather a union of such persons into a whole toward that very end, [i.e.] toward a system of well-disposed human beings in which, and through the unity of which alone, the highest moral

It is a collective duty of humanity to give the idea of the moral world objective reality as a “*corpus mysticum*” of human beings governed by the moral law.⁴⁵⁶ In talking about humanity in this way, Kant follows an Enlightenment tradition of secularizing the Christian notion of a community of believers as a mystical body of Christ, by referring to the collective unity of the wills of a community, a people, or a state as a “*corpus mysticum*.” The aim of organic analogies of this kind was to emphasize that a healthy community requires political and moral unity, without which it would be a mere conglomerate of individuals. They were meant to represent a community as a collective rational agent – an organized self-sufficient whole of which individuals are proper members with wills interdependent, each contributing to the proper function of the whole, and unified through common laws and public spirit – a “mystical body” bound to the “physical body” of actual social and political institutions. Moreover, individual members of a “*corpus mysticum*” did not have to co-exist in time. The mystical body of a people, for example, was represented as, in a sense, immortal, comprising generations upon successive generations of human beings.⁴⁵⁷

good can come to pass, yet the idea of such a whole, as a universal republic based on the laws of virtue, differs entirely from all moral laws (which concern what we know to reside within our power), for it is the idea of working toward a whole of which we cannot know whether as a whole it is also in our power: so the duty in question differs from all others in kind and in principle.” (Rel 6:97)

⁴⁵⁶ (KrV A808/B836).

⁴⁵⁷ Thomas Aquinas describes the mystical body of the church in this way: “The difference between the natural body of a man and the mystical body of the church is that the members of a natural body all exist together, whereas members of the mystical body do not. They are not together in their natural existence, because the body of the church is made up of people from the beginning to the end of the world. Nor are they all together in grace, because at any given moment there are people who do not have grace then but may have it later on; and there are others who already have it. So people can be classed as members of the mystical body because of their potentiality, and not merely when they are actually in it.” (St. Thomas Aquinas, *Summa Theologiae*, third part, chapter 8, article 3). Although this idea was particularly important in the religious tradition, it was adapted to secular contexts as well. For example, an individual king as the head of a state or a people as a mystical body was made immortal, in this sense, by the “incarnation” of the body politic in the kings that followed. Through his doctrine of rational faith, Kant extends this idea, I believe, to individual members of the Kingdom of Ends as well. Through their role as co-legislators in the moral community, they acquire the kind of immortality that used to be reserved for the kings.

As Kant makes clear in the *Review of Herder*, in the context of the idea of moral history, the terms “humanity” and “human race” signify “the totality of a series of generations which runs on into infinity.” Insofar as humanity has a final end in the ideal of the highest good, this end is to be approximated asymptotically by the series of human generations. It is this continuous approximation that is demanded by pure practical reason:

“If it is assumed that this series constantly approximates to the line of its destiny which runs along side it, it is not a contradiction to say that **the series in all its parts is asymptotic to this line yet coincides with it as a whole**. In other words, no single member of all the generations of the human race, but only the species, attains its destiny completely. The mathematician can provide elucidation here; the philosopher would say that the destiny of the human race as a whole is incessant progress, and that its fulfillment is merely an idea – of the goal to which...we have to direct our endeavors.” (*Review of Herder* 8:65, my emphasis)

Here, moral and cultural progress is conceived on the model that resembles Cassirer’s view of theoretical knowledge as constituted by a progressive series, in which the ideal “final” theory contains all the intermediate theories approximating it as special or limiting cases. Given that Kant adapted some key features of the methods of the mathematical natural sciences of his time to his philosophical investigations, his appeal to mathematical analogies should not be considered out of place and, perhaps, briefly reflecting on them can help elucidate his meaning. Consider a simple mathematical example of the kind of series Kant seems to have in mind. Take the sum of the infinite series $\sum_{n=1}^{\infty} 9/10^n$. A partial sum S_n of a series is defined as the sum of the first n elements. In this case, the partial sums 0.9, 0.99, 0.999, 0.9999, and so on, are asymptotically approaching 1. While any one partial sum only approximates the limit, the sum of the series as a whole coincides with it, that is, in this example $0.99999\dots=1$. The analogy Kant seems to draw is between a partial sum of such a convergent infinite series and a generation of human beings (a system of moral principles and ends at a particular stage of humanity’s moral

development), and the series as a whole with the ideal “final” system of principles and ends that constitutes the realized moral world.

Thinking of the relationship between the ideal “final” system of ends and the series that approximates it as a relation of identity also allows us to think of the members of the series as both *best possible approximations* of the ideal of objectivity and as *constituting* this ideal. Particular principles and ends that structure a social world at a given historical stage and morally permissible ends of individual agents are not given by pure reason alone and, therefore, do not fall under Kant’s definition of objective ends. Nevertheless, given that they have the form that the moral law requires, they can be said to have objective content insofar as they constitute a part of the series which coincides with the complete object of pure practical reason (the ultimate objective end) as a whole. But they can also be thought as best possible approximations to the ideal of objectivity represented as the highest good insofar as we can think of the objectivity of the content of our judgments as increasing through the progress of our social world towards this ideal.⁴⁵⁸

3.3

To make the meaning of the duty to promote the highest good as a collective duty more concrete, consider the following. The duty to promote the highest good expresses the demand that principles that “schematize” *a priori* duties be developed co-

⁴⁵⁸ This progress involves development of a shared interpretation of moral concepts and principles through critical reflection on the moral phenomena that become explicit or newly emerge through our shared practical life (such as morally-relevant features of marriage and of family life, the boundaries of privacy, of political correctness, moral features of immigration, treatment of animals, etc.). When we co-deliberate about the consistency of a certain practice with objective ends (with a duty of beneficence, for example), we gradually develop a shared and deeper understanding of what this consistency means. This understanding can serve as a basis for establishing institutions and practices that form the background against which our judgments can be more consistent across individuals, and recognized as consistent, in virtue of being based on the shared laws. The categorical imperative specifies the formal conditions of possibility of a shared moral world as the “privileged frame of reference” with respect to which objective ends can be specified; the ongoing shared practice guided by the ideal of the highest good provides the material conditions for its possibility.

deliberatively and in such a way as to approximate the condition under which everyone's morally-grounded conception of happiness is realizable. They may, for example, incorporate ideas about development of economic structures that support pursuit of private interests and self-sufficiency in the economic sphere while preventing economic and social alienation.

More generally, most duties of virtue, such as a duty of beneficence, are wide and imperfect. They leave us some latitude for deciding on what occasions and how to promote morally required ends and for the guidance of choice by the principles of prudence under the individual's ideal of happiness. They allow one, for example, "to limit one maxim of duty by another (e.g., love of one's neighbour in general by love of one's parents)".⁴⁵⁹ In other words, imperfect duties are not fully determinate with respect to their content. Individual judgment determines imperfect duties in particular cases and various pragmatic considerations are morally permissible at this level provided that they do not conflict with an agent's overall commitment to objective ends – of promoting the happiness of others, for example. But if there were no further morally-guided *coordination* of individual choices in such cases, no principle that demands their convergence, even if everyone acted on moral principles there would be no guarantee that the ends that morality requires us to promote – our own perfection and the happiness of others – will ever be collectively realizable. There would be no guarantee that it would really be possible for our maxims to converge towards a moral world. And even if this kind of convergence were to come about, it would be merely accidental.^{460 461}

⁴⁵⁹ (MdS 6:390).

⁴⁶⁰ Kant emphasizes this point in *Religion*: "to unite in an ethical community is a duty of a special kind (*officium sui generis*), and that, though we each obey our private duty, we might indeed thereby derive an accidental agreement of all in a common good, without any special organization being necessary for it, yet that such a universal agreement is not to be hoped for, unless a special business is made of resisting the

Consider, for example, the duty of beneficence. It is not enough to say that one should do one's fair share to help others, because the notion of a fair share does not seem to have a determinate meaning prior to concrete collective specification and distribution of obligations among persons.⁴⁶² In addition, without assurance that other actors will follow the same morally-guided policy, competitive environments create disincentives to acting morally or doing as much as one can. Charitable donation of funds that could otherwise be used to maintain competitive position, for example, can put an agent at a competitive disadvantage. Contemporary philosophical discussions about what the imperfect duties require of us seem to move in the direction of the need to perfect these duties at least to some degree through collective action. It is often argued that the duty of beneficence, in particular, should be made at least partly the responsibility of the state or other organizations and social groups which can in turn distribute individual responsibility through some appropriate mechanism (such as taxation in the case of a state, for example).

These discussions concern a need, which I believe Kant's notion of a regulative practical principle aimed to address. This is a need to regulate and coordinate individual practical judgment by requiring us to work collectively to create the conditions for "translation" of very general moral ends into a consistent system of particular moral requirements and practices that realizes (or at least approximates) these ends. That is, a

attacks of the evil principle (which human beings themselves otherwise tempt each other to serve as tools) by the union of all with one another for one and the same end, and the establishment of one community under moral laws, as a federated and therefore stronger force. (Rel 6:151)

⁴⁶¹ At this point one may object that the postulate of God's existence is intended to deal with the coordination problem and, once we have rational faith, there is no need for additional self-consciously collective coordination. But, for Kant, we are morally required not to leave things up to God when it is in our power to do something about them.

⁴⁶² Here I draw from Allen Buchanan's discussion of the duty of beneficence in "Perfecting Imperfect Duties: Collective Action to Create Moral Obligations".

system that creates the conditions for everyone to pursue and realize their ends consistently with everyone else.

Conclusion

The principal aim of this dissertation has been to show that we can fully understand Kant's practical philosophy, and the way it can meet certain challenges arising from Hegel's critique, only if we consider it in light of his methodological and architectonic concerns. In his work on Kant's philosophical relationship with the exact sciences, Michael Friedman points out that Kant's analysis of Newtonian mathematical physics inspired Kant's original conception of synthetic *a priori* knowledge leading to his theoretical critique. I have argued that Kant's appreciation of Newtonian method similarly deeply influences his practical thought and that recognition of this fact not only has important interpretative implications, but also offers a fruitful perspective for critical engagement with his moral philosophy and its objectors.

This dissertation outlined the methodological bases of Kant's critical philosophy and developed an account of Kant's moral theory *as a philosophical science*. On this account, Kant's moral philosophy appropriates the central features of the then revolutionary method of Newtonian natural science for the investigation of practical cognition. Indeed, Kant's "Copernican" transformation in practical philosophy – the idea that the concept of the good can be determined only after the moral law is established and by means of it – is inseparable from his "methodological Newtonianism". Recognizing this fact also sheds light on Hegel's critique of Kant's moral theory, particularly if we consider how fundamentally different Hegel's conception of philosophical science and method is from Kant's. While Kant's approach is "broadly Newtonian", Hegel's notion of philosophical science shares some key features of Goethe's conception of properly scientific

investigation. I have tried to show that his philosophical science of right, in particular, can be described as “broadly Goethean” *objective thinking* about freedom.

If my analysis of Hegel’s philosophical science of right has been convincing, there are good reasons to doubt the plausibility of Hegel’s ethical theory, or of any Hegelian theory based on this approach. These reasons also point to a way for Kant’s moral theory to answer Hegel’s critique. When we consider Hegel’s polemic against Kant through the lens of their deep methodological disagreement, we can see that Hegel’s challenge calls for a Kantian response that recognizes this disagreement and highlights the advantages of Kant’s conception of the relationship between *a priori* and empirical aspects of practical thought, between the role of philosophy and moral practice. On my view, these reflections support a new perspective on Kant’s moral theory that emphasizes developmental aspects of his conception of moral objectivity and the central role of the regulative ideal of the highest good – the view to which we were led by the account of Kant’s methodological Newtonianism developed in the first two chapters of this dissertation.

Both Kant and Hegel think that philosophy must help us identify with morality as rooted in our reason and essential to our nature as human beings. Both ascribe it a practical role of contributing to the realization of freedom in our practical lives. Yet, as we have seen, they have very different conceptions of what this general aim implies.

In making us aware of the connection between morality and reason (as our true self), Kant’s philosophical science seeks to strengthen our moral motives and to help guard against subordinating the demands of morality to (or treating them as on par with) sensible interests and desires. As Kant puts it, its role is to provide “access and

durability”⁴⁶³ for the principles of morality. In the Dialectic of the *Critique of Practical Reason*, Kant declares that philosophy was correctly understood by the ancients as a *doctrine of the highest good* – “a direction to the concept in which the highest good was to be placed and to the conduct by which it was to be acquired”.⁴⁶⁴ The critical philosophy, however, makes this doctrine into a systematic science based on *a priori* principles. The philosophical science of morals shows the highest good to be an ideal that has “an entirely well-grounded, objective reality in human reason”⁴⁶⁵ in the duty to promote this ideal – to make it our “special business” to join together in “the union of all with one another for one and the same end, ... [for] the establishment of one community under moral laws, as a federated and therefore stronger force”.⁴⁶⁶ Thus, by making explicit our duty to work together towards the realization of the ethical world of the highest good, the science of morals stresses *our own responsibility* for bringing about the conditions that secure the “access and durability” of morality’s principles. For Kant, complete objectivity of moral judgment, just like complete virtue, is an *ideal* and its constant approximation is our duty.⁴⁶⁷ On the understanding of Kantian thought put forward in this dissertation, this progress towards the ideal of complete objectivity is possible only through co-deliberation and collective action of humanity through history demanded by the duty to promote the realization of the highest good.

⁴⁶³ (KpV 4:405).

⁴⁶⁴ (KpV 5:108).

⁴⁶⁵ (Rel 6:95).

⁴⁶⁶ (Rel 6:151).

⁴⁶⁷ See e.g., (MdS 6:409).

To round things off, I would like to add a few final remarks on the way in which this understanding of Kant's conception of objectivity and Kant's methodological Newtonianism in general bear on Hegel's "immanent" critique of Kant's moral theory. In chapter 5, I connected Hegel's critique of Kant's moral philosophy to what I called "the second transition" in Kant's science of morals – the transition from the categorical imperative and most general *a priori* duties (the obligatory ends of one's own perfection and the happiness of others) to particular "applied" moral duties that stand under them. The possibility of this transition, I argued, is a key aspect of Hegel's "empty formalism" objection. According to Hegel, on the one hand, reasoning under the categorical imperative can result in objective practical judgments and reliably lead to good actions only if it has "the ethical as its support and foundation".⁴⁶⁸ On the other hand, the categorical imperative cannot ground a determinate and rationally-necessary articulation of the system of social institutions and norms of an ethical community that can provide this support and foundation.

We have seen Hegel argue that *only* an "immanent" theory of duties that forms part of the philosophical science of *the Idea* (of the kind he develops in the *Philosophy of Right*) can ground a system of duties that has the rational necessity and objectivity morality requires.⁴⁶⁹ On his view, any theory of duties based on "finite" approaches, like Kant's "broadly Newtonian" method, is seen as infected with arbitrariness and subjectivity. On Hegel's view, the *only* way to develop a theory of duties that exhibits genuine rational necessity and avoids introducing extraneous and contingent factors (and,

⁴⁶⁸ (PhR §141A).

⁴⁶⁹ (PhR §148R).

therefore, subjectivity) is by following the internal logic of practical thought itself – the dialectical development of the *concept of right* towards its actuality as the system of Ethical Life. It is worth noting that in Hegel’s theory, moral reflection under the categorical imperative still has a place, but now it is conducted within the context of ethical life that is, and is understood to be, thoroughly reasonable and rationally necessary.⁴⁷⁰ Hegel conceives of duties as aspects of a well-ordered, reflectively endorsed system of communal life, and their rational necessity as the rational necessity of the system of institutions and practices to which they are attached. Hegel’s duties have rational necessity and external presence in social reality as aspects of the concrete universal. In a sense, in his “immanent” theory duty mediates between “ought” and “is” – it is conceived as a rational demand to act in a way that *sustains* the ethical life of a community (including one’s own ethical character) that already “is” rational and actual.

Thus, on Hegel’s view, the immanent theory of duties treats moral requirements as objective in the following respects. First, they are conceived as generated internally, through the development of the Idea of right (or the will) itself and without a need to bring in anything external to the will. And secondly, duties are conceived as aspects of the social world as second nature – something individuals do simply by being proper members of their social world. Moral principles are embodied and manifested in actions of individuals and the functioning of social institutions. They are objective in the sense in which Hegel thinks of objectivity when he says that “the true objectivity of thinking

⁴⁷⁰ In his *Lectures on the Philosophy of Right*, Hegel says, for example, “[In the ethical] subjective self-consciousness remains subjective will, but loses its one-sidedness, for it is subjectivity that has its foundation in the objective concept, the good.” (VPR 3:482), quoted in Allen W. Wood, *Hegel’s Ethical Thought*, p. 217.

consists in this: that thoughts are not merely our thoughts, but, at the same time, the In-itself of things”.⁴⁷¹

I have argued that no Hegelian “immanent theory of duties” is capable of fulfilling the aim of reconciliation Hegel assigns to his philosophical science of right – the aim of helping us recognize that our social world, which initially seems opposed to our will, in fact already has all the preconditions for realization of our freedom and is the realm in which all aspects of freedom can be completely realized. More generally, no “immanent theory” of the kind Hegel envisions can show what both Kant and Hegel want to show – namely, that morality is not external to us as individuals with our own particular interests, ends, and aspirations.

We have seen, for example, that Hegel (and Hegelians) offer no convincing reason for thinking that a system of Ethical Life would be able to accommodate social, political and economic changes that give rise to new moral problems. In particular, it is worth noting that (in contrast to Kant’s ideal of the ethical community of the highest good that embraces humanity as a whole) Hegel’s theory articulates a self-sustaining and self-contained structure of the nation-state. This alone already raises doubts about the ability of a Hegelian system to withstand political and socio-economic pressures and handle new moral problems, which are bound continuously to arise in an ever expanding and interconnected world, without having to undergo revision to its basic structure.

Hegel’s critique of Kant’s inability to provide an immanent theory of duties – that the categorical imperative cannot serve as the universal substantive criterion of truth of practical judgment or ground a system of particular duties or practical judgments whose

⁴⁷¹ (EL §41A2).

content is perfectly objective (determinate in a way that makes them rationally necessary) – would present a problem for Kant’s theory only if it is supposed that his practical philosophy aims, or should aim, to provide a system of duties the content of which is perfectly objective in the two-fold sense of an immanent theory outlined above.

On the interpretative proposal I defended in chapter 6, Kant would agree that the categorical imperative is not a universal criterion of the material (objective) truth of practical judgment. Rather, it is a *necessary* condition of objectivity of practical judgment. The truth of practical judgment, the objectivity of its content, develops through co-deliberation and collective action of humanity united by the duty to bring about the ethical world of the highest good. I suggest that in one sense Hegel is right – on Kant’s view, complete self-determination, autonomy, is never perfect or complete, but ever more closely approximated. Yet, Kant does not simply overlook the possibility that philosophy may be able to discover and establish the universal criterion of material truth of practical judgment or articulate an objective ethical order. What is at stake is a very different conception of the nature and method of philosophical science, and of its role in relation to moral practice.

From a Kantian point view, not only is Hegel’s “immanent theory of duties” untenable and incapable of helping us identify with moral requirements; it is also, contrary to Hegel’s stated intention, a philosophical construction that *feigns a hypothesis*, however insightful, ingenious, and philosophically rich it might be. Even if we grant, and this is quite controversial, that Hegel’s philosophical science is presuppositionless, the dialectical progression of the *Philosophy of Right* culminating in the articulation of Ethical Life contains elements and transitions whose necessity and immanence in the

nature of the will can be plausibly doubted. We have seen that Hegel's articulation appears to work up what Dudley Knowles calls "a mixture of contemporary institutions and respectable proposals for reform" into "a constitutional blueprint which he believes to incorporate elements of acceptable principle and unquestionable practice".⁴⁷² Thus, many aspects of Hegel's articulation of Ethical Life seem to exhibit precisely the fault he finds with the alternative "finite" approaches – every step and transition in this articulation introduces subjective considerations that "show its connection with one's own ideas and with commonly encountered principles and thoughts, ends, drives, feelings, etc".⁴⁷³ This undermines the purported rational necessity of the structure of Ethical Life and makes Hegel's claim that only an "immanent theory" of the kind he offers is thoroughly rationally justified and objective highly dubious indeed.

Doubts about the plausibility of any Hegelian "immanent theory of duties" and of Hegel's critique of Kant raised in this dissertation highlight the comparative attractiveness of Kant's broadly Newtonian conception, which, in its appeal to regulative principles (including the duty to promote the highest good), ties objectivity of both theoretical and practical cognition to ongoing practice within the framework of constitutive laws. Just as fully objective theoretical knowledge is gradually approximated through scientific practice, our practical knowledge and the reality of the objective moral order is approximated through our shared practice of living together. The practice, structured by the *constitutive* framework of the categorical imperative and guided by the *regulative* principles (such as the duty to promote the highest good) makes the asymptotic

⁴⁷² Dudley Knowles, *Hegel and the Philosophy of Right*, pp. 326-327.

⁴⁷³ (PhR §148R).

process of reconciliation possible by constructing an ever more rational and reasonable system of social institutions according to the plan humanity itself collectively devises and re-devises over time. The theory puts no further constraints on the kinds of critical reflection and reform possible through this activity.

On this view, a proper articulation of the ethical order in the highest good cannot be given *a priori*, but only approximated progressively and asymptotically through the work of practice itself. This is an activity through which humanity, as Ernst Cassirer puts it, continuously creates “a new body for itself which belongs jointly to all.”⁴⁷⁴ We may recall Hegel’s complaint that Kant’s theory places on an individual an undue burden of being a “dialectician”. Yet, Kant’s science of morals does not leave an individual to deal entirely on her own with a complex tangle of obligations and competing universal and particular interests. In a sense, humanity as a whole is a “dialectician”. For, rather than being a privileged *theoretical* task of philosophy, it is our collective *practical* task of “*making*” objective moral requirements and practices that structure our shared social world. Specifying the structure of ethical community is not a problem for philosophy to solve, and especially not by simply bringing to consciousness the achievements of reason that somehow come about, as Hegel puts it, “behind the back of self-consciousness”. As a *practical* ideal, it is “the *problem* of a morally legislative reason”.⁴⁷⁵ Its articulation is possible only through the collective action of the morally legislative reason of its members – through exercise of freedom. This self-conscious activity is the sole source of

⁴⁷⁴ Ernst Cassirer, *The Logic of the Cultural Sciences*, p.127.

⁴⁷⁵ (Rel 6:100).

the particular shape this “universal republic based on the laws of virtue”⁴⁷⁶ takes as it develops over time. Moreover, insofar as action in general unifies the will, an individuals’ self-conscious participation in collective deliberation and action is what gradually reconciles the particular with the universal will and helps us see our social world as making possible and expressing our freedom.

⁴⁷⁶ (Rel 6:98).

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