

THE NECESSITY AND LIMITS  
OF KANT'S TRANSCENDENTAL LOGIC,  
WITH REFERENCE TO NIETZSCHE AND HEGEL

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**A** RECENT CRITIQUE of analytic philosophy undertaken by one of its leading representatives, Peter Unger,<sup>1</sup> highlights the problem of whether or not the most common approaches in analytic philosophy—in ontology, epistemology, and ethics—are merely mental exercises that cannot truly claim objective validity. The discussion to which his book has given rise demonstrates that Unger's account provides an important impulse to question some hitherto unexamined basic premises regarding the interrelation of logical form and actuality. In this essay I seek to contribute to this discussion by taking it up at the point at which Unger eventually left it, and by proceeding two steps further.

The first step is to give a systematic account of the problem Unger highlights by demonstrating the necessity of Kant's transcendental logic. Kant was in fact the first to show that any ontology that endeavors to undertake an immediate translation of formal logic into a doctrine of being exercises—in Kant's terms—the determining power of judgment, but without restricting its use to the spatiotemporal manifold provided by intuition, which produces nothing but empty thoughts.

My second step will be to open up a perspective that lies beyond Kant's standpoint with reference to Nietzsche and eventually to Hegel. This may provide an idea of the limits of transcendental logic and of the objectivity justified by it.

I

Kant's status as a seminal philosopher is commonly regarded as rooted in the Copernican turn. But it is scarcely understood that the very center of this turn itself is a revolution within logic. We know that

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<sup>1</sup> Peter Unger, *Empty Ideas: A Critique of Analytical Philosophy* (New York: Oxford University Press, 2014).

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Kant no longer undertakes the inquiry into being and its determinations, but more fundamentally asks about the conditions of the possibility of knowledge of objects in general. Instead of immediately seeking knowledge of objects, we seek to comprehend knowledge itself. In a popularized manner this is often described as follows. In Kant, we turn from the inquiry into the nature of true being (ὄντως ὄν), substance, to inquire instead about the “subject.” Now, the latter would be misunderstood if we were to interpret this as if Kant had undertaken a descriptive inquiry into the given constitution of the human capacity for cognition, which would not be revolutionary, for we find such reflections in Descartes, Locke, Hume, and of course in later epistemologies. If Kant would have thought in such a naïve way that we have to figure out the given constitution of the human faculty of knowledge in order to grasp what we can know and cannot know, the whole *Critique of Pure Reason* would instantly succumb to skepticism, the very skepticism which Kant wants to overcome. As is well known, Kant did encounter misinterpretations like this, which led him to emphasize the difference between mere subjective idealism and transcendental philosophy in the second edition of the *Critique of Pure Reason*.<sup>2</sup> It would indeed be an underestimation of the significance of the *Critique of Pure Reason* to regard it as mere epistemological reflection. Why? The answer is that Kant’s fundamental question is, at its core, at the same time logical and epistemological. This is nothing less than a revolutionary new account of logical form which can be, in the context of Hegel’s *Phenomenology of Spirit*, described as a shift from the consciousness of the logical form in its first immediacy (formal logic) to immediate self-consciousness of the logical form (transcendental logic).<sup>3</sup> I shall now explain the necessity of the emergence of Kant’s transcendental logic and its revolutionary basic question.

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<sup>2</sup> Especially the objective deduction of categories and the “Refutation of Idealism,” in Immanuel Kant, *Critique of Pure Reason* (hereafter, *CPR*), ed. and trans. Paul Guyer and Allen Wood (New York: Cambridge University Press, 2009), B274–75, 326.

<sup>3</sup> See Michael Wladika, *Nivellierung, Prinzipialisierung und Revolutionierung von Erfahrung: Formen neuzeitlichen Denkens, aus dem Zusammenhang zwischen Descartes und Hegel herausentwickelt* (Würzburg: Königshausen & Neumann, 2007), 64–68.

(1) If we dare to take a complete overview of the history of Western philosophy from Parmenides up to the critical Kant, the question arises: what has been its most fundamental presupposition (with the exception of Heraclitus and the later Plato)? This presupposition consists in a specific conception of the identity of thinking and being—namely, a naïve confidence in the ontological relevance of formal logic. This amounts to the presupposition that the logical principles (for example, the principles of identity, of noncontradiction, and excluded middle) and the form of thought, especially the form of categorical judgment, are at the same time principles and forms of actual being.<sup>4</sup> So if one thinks in strict accordance with the forms and principles set out by formal logic, which means avoiding contradiction, one automatically grasps being-in-itself. Thus philosophizing *in intentione recta* (which means that cognition directly focuses upon the object instead of focusing on itself) seems to be viable. Therefore, the logical principles are part of ontology.<sup>5</sup> Departing from Parmenides' didactic poem, in which actual being is thought as purely identical and therefore free of contradiction in itself, everything that cannot be conceived as free of contradiction, namely, plurality and becoming, is sheer illusion, nothing. We then encounter this premise explicitly in Aristotle.<sup>6</sup> This supposition—that is, the concept of identity without internal relatedness to its other, to plurality, or of actual being as a purely self-identical unity that is free of contradiction—is the main feature of all Eleatism within philosophy, and the metaphysical basis of all particular sciences as well. Hegel will refer to Eleatism as the “standpoint of the understanding.”<sup>7</sup> This, as we shall see, is of great importance to our

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<sup>4</sup> Hegel describes this standpoint of immediate metaphysics as “Erste Stellung des Gedankens zur Objektivität.” See Georg Wilhelm Friedrich Hegel, *Encyclopedia of the Philosophical Sciences in Basic Outline. Part 1*, trans. and ed. Klaus Brinkmann and Daniel O. Dahlstrom (New York: Cambridge University Press, 2010), pars. 26–36.

<sup>5</sup> For a systematic account on the relation between ontological and transcendental reflection, see Franz Ungler, “Ontologie und Transzendentalphilosophie,” in *Franz Ungler: Zur antiken und neuzeitlichen Dialektik*, ed. Michael Höfler and Michael Wladika (Frankfurt am Main: Lang, 2005), 105–16.

<sup>6</sup> Aristotle, *Metaphysics* 4.3–8; 11.5–6.

<sup>7</sup> “Das Denken als Verstand bleibt bei der festen Bestimmtheit und der Unterschiedenheit derselben gegen andere stehen; ein solches beschränktes Abstraktes gilt ihm als für sich bestehend und seiend.” Georg Wilhelm

question, for Kant's transcendental logic will turn out to be a form of foundational reflection on precisely this standpoint. Kant was the first thinker to see that the presupposition of this unity of formal logic and being was a subreption. In fact, logic and metaphysics fall apart; even more, they contradict each other, as is evident in the history of pre-Kantian philosophy itself. There are two aspects of this tension, and, as we shall see, Kant was aware of one of them.

(a) There is a contradiction between the realization of metaphysics in the Western tradition, which consists in a contradiction between the most fundamental metaphysical concepts or principles, on the one hand, and the presupposition that actual being, substance, is conceivable as free of contradiction on the other hand. Concepts like κίνησις, οὐσία, ἐντελέχεια, σύνολον, *causa sui*, *monad*, and, as Kant indirectly shows, the concept of freedom and the "I" have something in common: they cannot be conceived other than as a unity of opposed determinations (being–nothing, rest–motion, particular–general, possibility–actuality, matter–form, unity–plurality, cause–effect, determination–indeterminacy, subject–object). The speculative content of these concepts thus demonstrates that actual being contains within itself contradiction. This means that comprehending these concepts fully does not mean avoiding contradiction, but thinking in order to resolve it, which constitutes the speculative content of pre-Kantian metaphysics in its enduring significance.<sup>8</sup> This point will be important with respect to the relevant limit of Kant's transcendental logic.

(b) The falling apart of thinking and being finally appears as such in pre-Kantian metaphysics itself, namely, in rationalism and empiricism. To begin, Descartes was the first to emphasise the problem of how we can legitimately assert the objective validity of ideas as the central problem of knowledge. For what reason can we claim a correspondence between *realitas objectiva* (*sive repraesentativa*) and *realitas formalis* (as mind-independent reality)? Neither Descartes nor the following rationalists and empiricists were able to offer a real

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Friedrich Hegel, *Enzyklopädie der philosophischen Wissenschaften I, Werke 8* (Frankfurt am Main: Suhrkamp, 1995), par. 80.

<sup>8</sup> For the systematic significance of contradiction in view of Hegel's logic, see Franz Ungler, "Die Kategorie Widerspruch," in *Franz Ungler: Zur antiken und neuzeitlichen Dialektik*, 135–55.

solution.<sup>9</sup> Therefore, on both sides thought came to a dead end in trying to solve this problem, which led to Kant's Copernican turn. Let us consider rationalism and empiricism in turn.

(2) To begin with dogmatic metaphysics, Christian Wolff tried to discover propositions concerning actual being by means of pure notions derived from logically correct reasoning. But Kant points out that if we in this way consider formal logic to be not only a guideline (*Kanon*) of thinking in general, but immediately the *organon* of knowledge, we end up either in a collection of mere tautologies (as in Wolff) or in unresolved contradictions. Regarding the latter, metaphysics has necessarily turned out to be a "battleground of endless controversies," as Kant puts it.<sup>10</sup> Why is this so? It is because we can draw conclusions that meet all the logical demands of consistency but nevertheless generate conflicting results, as in rational cosmology. How is this so? At first, the act of knowing builds on certain fundamental principles, for example, the principle that every change has a cause (principle of causality). Now, if one thinks logically and correctly in accordance with this principle, one is led to seek totality, or as Kant puts it, to go beyond the limit of possible experience, namely, to seek a first cause. The logical relation of cause and effect equally compels one to assert that there must be a first cause and that there cannot be a first cause, thus indicating that something must be wrong with the presuppositions.

Kant gained a fundamentally new insight: The pre-Kantian metaphysics maintained that the location of the contradiction would simply be the world of sensory perception, the world of becoming (as first demonstrated in Zeno's paradoxes), as opposed to the realm of pure thinking, and that it is by pure thinking alone that we avoid contradiction and grasp the real being. Kant discovers via his analysis of rational cosmology that the unresolved contradiction occurs in pure thinking itself. Therefore, he concludes, formal logic cannot serve immediately as a means of gaining knowledge that can claim objective

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<sup>9</sup> However, it is necessary to bear in mind that Descartes prefigures Kant's transcendental reflection and even gains crucial insights into the dialectical nature of thought, as two groundbreaking studies by Michael Wladika demonstrate: *Nivellierung*, and *Breite des Ichs: Systematische Studien zu Descartes* (Würzburg: Königshausen & Neumann, 2007). The focus on the reification of the I and the psychophysical problem that dominates the reading of Descartes (especially in the philosophy of mind, but also in Heidegger) is too narrow to do justice to Descartes.

<sup>10</sup> *CPR*, Aviii.

validity. This is one fundamental reason for Kant to develop a completely new standpoint.

(3) Empiricism tried to solve the problem of knowledge, too, but departing from different presuppositions. At first, the identity of thought and being should be guaranteed by means of a psychological approach, assuming a representational relationship between the inner world and the outside world. However, in Hume, the most consistent exponent of this view, this approach proved to be unsustainable, which is a second fundamental reason for Kant's Copernican turn. Why is this so? If every idea or content of consciousness should be proved to be grounded in sensation, then not only does all objectivity immediately vanish into a "bunch of impressions," so that something like a common world is a fiction, but also the so-called subject is nothing but a Heraclitean flow of impressions in which it immediately dissolves. Thus, not only metaphysics, but all scientific knowledge and its presuppositions, are fundamentally unjustified. For example, the critique of the concept of substance discards the meaning of a material substance, which in turn entails the pointlessness of the conservation principle of physics. Causality, the basic principle of all scientific explanation, has to be regarded as sheer fiction, too, which in turn entails the pointlessness of the principle of inertia. Generally speaking, the logical and the real are completely torn apart. This skepticism is the other dead end of solving the problem of the possibility of knowledge: knowledge and its character of necessity actually cannot exist at all. Necessity always means a unity of thinking and being. This is a crucial point, because necessity will be the central category in Kant's transcendental reflection, with respect to both the theoretical and the practical spheres (general validity, bindingness). Kant recognizes that explaining the identity of thinking and being naïvely in terms of a representational theory has undermined itself, too.

(4) So what is the result? Departing from the basic premise of immediate metaphysics, which is the presupposition of the immediate ontological relevance of formal logic, we arrive at empty ideas. The identity of thinking and being, or of the logical and the real, cannot be presupposed (this would be the "dogmatic slumber" of immediate

metaphysics),<sup>11</sup> but turns out to be itself the main systematic problem, which gives rise to the new fundamental question of philosophy, which is at the same time the main question of transcendental logic: How is this identity possible at all? This is precisely the core question of Kant's transcendental logic,<sup>12</sup> "namely how *subjective conditions of thinking* should have *objective validity*, i.e., yield conditions of the possibility of all cognition of objects."<sup>13</sup> The subjective conditions of thinking are the logical forms (the form of the concept, the forms of judgment, especially the categorical judgment, and of inference) and principles (principles of identity, noncontradiction, and excluded middle). For illustration, one may think of the famous example Kant gives in his *Prolegomena*, in which he distinguishes the judgment of perception and the judgment of experience. How can we justify the shift from asserting a mere subjective relation of perceptions to claiming an objective relation (for example, if we use the logical form of the hypothetical judgment "if-then" to assert a causal nexus which is objectively valid)? Under which conditions are we entitled to presume that causality, for example, is not a purely subjective form of thinking? All scientific knowledge, all explanation, all reasoning assumes that. Generally speaking the question is: Under which conditions are judgments that claim objective validity possible at all? What do the subjective conditions of thinking, the logical in general, have to do with objective reality, with knowledge of objects? The fundamental presupposition of all scientific knowledge is a correspondence of the logical and the real, that is to say, that the logical is not merely psychologically valid but also objectively valid. Under which universal and necessary conditions is a correspondence between thinking or the logical and being or reality possible?

This is the revolutionary new question of transcendental logic. It is at the same time logical and epistemological. This is crucial: transcendental philosophy is not—as often stated—a peculiar unity of rationalism and empiricism; it is not simply an epistemology.

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<sup>11</sup> See Immanuel Kant, *Prolegomena to Any Future Metaphysics That Will Be Able to Come Forward as Science* (1783), in *Theoretical Philosophy after 1781*, ed. Henry Allison and Peter Heath (Cambridge: Cambridge University Press, 2002), 4:260, p. 57.

<sup>12</sup> Kant formulates this to demonstrate the necessity of a transcendental deduction.

<sup>13</sup> *CPR*, B122.

Epistemology was just the aporetic attempt to bridge the gap between formal logic and ontology. There is no alternative to Kant—the immediate metaphysical reflection, ontology, is finished with.<sup>14</sup> Kant inquires into that which lies behind previous epistemologies, the prerequisites of the interrelation of the logical and reality. Bruno Liebrucks, one of the most comprehensive and insightful interpreters of Kant and Hegel in the German speaking world, puts it this way: The task of the *Critique of Pure Reason* is to answer the question of the significance of formal logic with respect to knowledge.<sup>15</sup> The collapse of previous metaphysics showed that it does not have immediate significance. But as formal logic deals with the form of understanding in general according to Kant, it has to have import with respect to knowledge. Kant's endeavor is consequently to unfold systematically all the presuppositions that guarantee that thinking in accordance with the forms and principles of formal logic does not result in mere tautologies or lead to contradiction but is objectively valid. The *Critique of Pure Reason* defines the scope and the limits of the import of formal logic in relation to objectively valid knowledge.<sup>16</sup> Insofar as we assess both aspects (scope and limit), we can read Kant's transcendental logic as an answer to this question: What knowledge do we achieve or obtain about being or actuality by means of formal logic?

(5) Now, if we take this question seriously, we discover that Kant engages in a radically new mode of thinking. All distinctions he is exposing are not findings in the sense of psychological or anthropological reflections on so-called human nature. Of course, Kant uses the terminology of the tradition, especially of rational psychology. But the meanings of the terms change, for they are utilized to develop a system of pure positings—namely, positings that are necessary in order to guarantee objective validity to the forms and principles of formal logic.<sup>17</sup>

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<sup>14</sup> See Ungler, "Ontologie und Transzendentalphilosophie," 116.

<sup>15</sup> This is shown in detail in Bruno Liebrucks, *Sprache und Bewußtsein, vol. 4: Die erste Revolution der Denkungsart. Kant: Kritik der reinen Vernunft* (hereafter, *SuB*) (Frankfurt am Main: Lang, 1968).

<sup>16</sup> This is shown positively in the "transcendental analytic," and in terms of its limit in the "transcendental dialectic."

<sup>17</sup> One must not be misled by the fact that Kant frequently formulates matters in an impure way measured in terms of transcendental reflection, for example, pointing at "our" faculty of understanding, the "human"



So much for the basic question of transcendental logic and its necessity. It is important to see that if one fails to grasp this question, one gets Kant wrong and reads him as if he were telling us a story about the nature of human understanding along the lines of previous metaphysics or epistemologies. This seems to be the most common misconception of Kant in the literature.<sup>18</sup> Against the background of this question, we can capture the main difference between formal and transcendental logic: formal logic presupposes the constitution of the objectivity of the object, whereas transcendental logic shows the mode of the constitution of objectivity.

## II

I mentioned above that the *Critique of Pure Reason* should be regarded as a system of positings. I shall now focus on one that is perhaps the most important aspect, namely, the new comprehension of logical form.<sup>19</sup> This new comprehension can be presented as a conclusion drawn from three premises:

P1: Logically correct (contradiction-free) thinking ought to be objectively valid at the same time.

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understanding as opposed to an intuitive understanding, or in asking: "Now what are space and time? Are they actual entities?" *CPR*, B37. This is not an accidental failure for it can be demonstrated that this tendency to backslide to a metaphysical way of thinking follows from a contradiction within the very core of transcendental logic. See Max Gottschlich, "Transzendentalphilosophie und Dialektik," in *Die drei Revolutionen der Denkart: Systematische Beiträge zum Denken von Bruno Liebrucks*, ed. Max Gottschlich (Freiburg/Munich: Alber, 2013), 69–86.

<sup>18</sup> Schopenhauer is a prominent example. Metaphysical readings of Kant are still far from being overcome; rather, it is the basic prevailing perspective, which remains unchallenged even in otherwise most insightful and subtle interpretations like Peter Strawson's *The Bounds of Sense* (New York: Routledge, 2007), or Otfried Höffe's *Kants Kritik der reinen Vernunft. Die Grundlegung der modernen Philosophie* (Munich: Beck, 2004).

<sup>19</sup> See Max Gottschlich, "Die Überwindung der technischen Auffassung der logischen Form – Ein Ausblick von Kant auf Hegel," in *Hegel-Jahrbuch* (New York: De Gruyter, 2015); and Max Gottschlich, "Logik und Selbsterkenntnis," in *Perspektiven der Philosophie* (Leiden: Brill, 2015).

P2: Pure logical forms cannot automatically present objects, therefore a justification of their validity claim is required (transcendental deduction, not a mere empirical one).

P3: This justification requires necessarily establishing an a priori (universally valid and necessary) relation between the logical form and that we call the object.<sup>20</sup>

C: Therefore, the logical must be regarded as forming form, as logical activity a priori, which constitutes the identity of something as something, the objectivity of the object.

Let me point to some crucial aspects of what follows from this.

(1) Kant maintains that we have to posit two sources of knowledge, sensibility and understanding. Broadly speaking, the first deals with the matter of knowledge, and the second deals with the form of knowledge. It is important to keep in mind that the two sources are not things simply found, with which we could perhaps become acquainted via introspection, but positings that are necessary to answer his basic logical question.

(a) On “understanding”: Transcendental logic revolutionizes the concept of the concept. The concept is not like an empty box, waiting to be filled with content or to be applied to given objects or particulars. Rather, the concept is a concept if and only if it grasps something. The forms of formal logic are objectively valid only as functions,<sup>21</sup> as modes of logical activity of setting a manifold of representations into a unity (categories). These are the concepts of the understanding, and they are nothing other than spontaneously ordering intuitive representations.<sup>22</sup> This is the transcendental, which means the experience-enabling use of concepts. The meaning of the concepts (categories), which is their objective validity, is restricted to this empirical use. Thus, the concept can maintain objective validity only insofar as the concept is nothing other than the activity of determining given matter.

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<sup>20</sup> “Die formale Logik stellte die Erkenntnisfrage schon deshalb nicht, weil ihre Selbstsicherheit bis auf den heutigen Tag so groß ist, daß sie sagt, es könne dem Menschen überhaupt kein Inhalt gegeben werden, wenn nicht innerhalb ihrer Denkformen.” *SuB*, 420.

<sup>21</sup> *CPR*, B93.

<sup>22</sup> “Es ist eine der wichtigsten Errungenschaften Kants, gezeigt zu haben, daß reine Denkformen, die nicht auf den Verstandesgebrauch *an* der Erfahrung eingeschränkt sind, nonsens sind. Begriffe, die nicht etwas begreifen, sind keine Begriffe.” *SuB*, 458.

(b) On “sensibility”: Interpreting the formal-logical form as *forma formans* requires the positing of a second, separated stem of knowledge: sensibility. Why? Because the concept is nothing other than the logical activity of uniting a manifold, and therefore it is only an actual concept on the occasion of the givenness of the manifold, that is, the sensible matter. “Givenness” means an immediacy which is not derivable from the understanding alone. What is “given”? Not an object, but the mere “that” (*Dass*) of the appearance.<sup>23</sup> Why is the givenness of the matter necessary? In order to overcome the problem which arose in Descartes, namely, that we cannot justify the objective validity of representations by comparing our representations, on the one hand, with “reality,” on the other hand, to see if they correspond. That is naïve. All we have is representations. So in order to guarantee that appearances are not a mere delusion but could be understood as experience, as determinations of an object, we must posit this second source of knowledge.

(2) Now, sensibility and understanding must come together—but at the same time Kant stresses that all determinacy of the objectivity of the object must be regarded as grounded in the understanding.<sup>24</sup> The matter which sensibility provides must not contribute to the determinacy of the object (it contributes just the simple “that”—nothing more). Previous epistemologies maintained that things are determinate, identical in themselves, and we have simply to represent their determinateness and identity properly. Then knowledge a priori, strict universal validity, and necessity of knowledge of objects would clearly not be possible. Why is this so? Because we could never know what determinacies will show up in the next minute. This means that the identity of the object, its behavior, would never be predictable, controllable. Only the object of appearance can be an object regarded as determinable completely a priori. We have no power over the identity or determinacy of things in themselves; we cannot constitute the determinacy of a thing in itself.

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<sup>23</sup> What is the mode of being (*Seinsweise*) of the presupposed matter of knowledge? It has to be posited as absolute position, that is, it is presupposed as the nonposited, as the indeterminate *ὑποκειμενον*.

<sup>24</sup> “als was muß der Gegenstand verstanden werden, wenn er a priori erkannt werden können soll? . . . er muß als solcher verstanden werden, der von sich aus gar nichts zur Erkenntnis beitragen kann, d.h. als Erscheinungsgegenstand, der kein erkennbares Ansichsein hat. Nur das kann von ihm erkannt werden, was *nur* meine Vorstellung ist.” *SuB*, 461.

That is why all determinacy of the objectivity of the object has to be regarded as grounded in the understanding. One cannot overemphasize: The aim of transcendental logic is to secure the character of necessity of knowledge. From this follows that something like an essence or being (*οὐσία*), which presents itself, which is determined in itself and by itself in its appearance, must not exist under the presuppositions of transcendental logic, which means it cannot be regarded as possible object of knowledge, since the character of knowledge—as being necessary—could not be guaranteed. This is the most fundamental reason for Kant’s separation of thing in itself and appearance. This separation does not reflect an epistemological modesty regarding given “bounds of sense” (Strawson) for supposed finite human capacities. Kant knows that arguing this way would amount to subjective idealism or skepticism, which is exactly what transcendental logic seeks to overcome from its very outset.

(3) The most essential point in Kant’s revolutionary account of logical form is that he discovers a logical form that was hitherto forgotten in formal logic and which has to be regarded as the supreme and governing principle of all logical form (the form of understanding), which is the pure form of reflection, the pure form of self-consciousness, the unity of transcendental apperception (I think). The logical I is the principle which governs the uniting of the manifold of the representations,<sup>25</sup> the absolute form of all knowing and the ground of the objectivity of the object. The forms and the principles of formal logic are to be understood with regard to the logical I. This means that:

(a) Every particular logical form (category) is a particularization of the logical I, since every category is a particular way of uniting the manifold.

(b) The logical principles (mainly the principles of identity and noncontradiction) are no longer simply axioms. According to formal logic, the principles of logic cannot be positively grounded or proved, as every proof or every syllogism already presupposes these principles. All deductive (as well as inductive) reasoning must therefore ultimately

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<sup>25</sup> The synthetic unity of transcendental apperception has to be posited as the same principle which provides unity in judgment (metaphysical deduction), on the one hand, and unity in the intuitional representations, on the other.

rest upon principles which seem to be given “patterns of reason”<sup>26</sup> that are regarded as *per se notum*.<sup>27</sup> In this sense, formal logic as a whole rests upon a sheer positing, and it therefore contradicts itself insofar formal logic would claim to be a proper science and not a mere technique. Hegel regards formal logic as an “*irrational* cognition of the *rational*.”<sup>28</sup> This is true given that formal logic cannot ground its own principles. Now, in transcendental logic, thought can proceed a step further and enlighten the relative necessity of this positing. Transcendental logic reveals that these principles are demands of consistency that are to be set in order to maintain or preserve the identity of the self-consciousness.<sup>29</sup> This point is of the utmost importance for grasping the inner relation of formal and transcendental logic. Transcendental logic clarifies that these principles do not govern the understanding as given, external, unmoved movers, as formal logic and pre-Kantian ontology ultimately meant them to,<sup>30</sup> but they govern

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<sup>26</sup> See Paul Pietroski, “Logical Form,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta: <http://plato.stanford.edu/archives/fall2014/entries/logical-form>.

<sup>27</sup> “[S]ome of the principles will be derived from axioms, and others will be unproved (for there cannot be demonstration of everything), since demonstration must proceed *from* something, and have some subject matter, and prove something.” Aristotle, *The Metaphysics*, trans. Hugh Tredennick (Cambridge, Mass.: Harvard University Press, 1975), 3.2.997a7–9. See also Aristotle, *Posterior Analytics* 1.2.71b26–29. This axiom is, according to Aristotle, the principle of noncontradiction: Aristotle, *Metaphysics* 4.3.1005b14–34. Interestingly, we can find an argument of analogous structure in Husserl’s account on transcendental logic. As opposed to Kant, Husserl maintains the primary question of transcendental logic to be “how is logic possible?”, and the answer to which should be found in a “phenomenology of reason.” Husserl ends up in an attempt to base transcendental subjectivity in something “primordially given,” which is at odds with Kant’s revolutionary comprehension of the logical form, ultimately a backlash to a pre-Kantian standpoint. For a discussion, see Errol E. Harris, *Formal, Transcendental, and Dialectical Thinking: Logic and Reality* (New York: State University of New York Press, 1987), 89–103, esp. 99.

<sup>28</sup> *Hegel’s Science of Logic*, trans. A. V. Miller (Atlantic Highlands: Humanities Press International, 1995), 613.

<sup>29</sup> *CPR*, par. 16. Fichte will demonstrate this more consistently in his *Wissenschaftslehre* (1794).

<sup>30</sup> Aristotle’s concept of the *primum mobile* expresses that, despite his attempt to overcome Eleatism, his concept of substance is ultimately dominated by the Eleatism of formal logic. See Max Gottschlich, “Der Begriff des konkret Allgemeinen bei Platon und Aristoteles – Eine Infragestellung formallogischer Ontologien?” in *Theologie und Philosophie* 89, no. 1 (2014): 19–28.

the understanding as posited unmoved movers for the sake of the preservation of the identity of self-consciousness.

From Kant's standpoint, the positing of these principles loses its unfoundedness or irrationality. The logical form is not an immediacy which can be understood as a *per se notum*, but proves to be a posited immediacy. Furthermore, the positedness of the logical principles presents itself in the very movement of thought, for what happens in this foundational reflection is that the immediate consciousness of the logical form reflects itself and thereby displays the form of immediate (or pure) self-consciousness. Given that, the foundational circle is not simply vicious or a manifestation of the "bad infinite" (Hegel) at all. Rather, it shows the form of self-presupposition in thinking the logical form, and this is nothing other than the form of self-relationality of thought—which is the logical I as absolute (self-relating) form (the absolute negativity in terms of Hegel's logic of essence). Thus, one can say that it is in this foundational problem that formal logic shows its bounds in thinking the logical form and naïvely points beyond itself toward the standpoint of transcendental logic.

(4) These points together imply a revolutionary account of the comprehension of objectivity: The objectivity of the object is nothing other than universal or logical subjectivity. Objectivity is not, as common sense believes, the representation of something beyond the I, of an object outside us, but a system of necessarily related representations. Therefore, according to Kant, the objectivity of the logical form requires the givenness of the matter as a separate source of knowledge and a necessary relation of the representations to each other. Again, it is important to note that the limitation of knowledge to the object of appearance must not be regarded as an expression of skepticism or the modesty of telling a story about alleged finite human capacities. Its purpose is rather the opposite: this and only this limitation will guarantee the necessity of knowledge, which means the thoroughgoing determinacy of the object.<sup>31</sup> Thus knowledge or truth, according to transcendental logic, cannot be thought of as *adaequatio*

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<sup>31</sup> Appearance according to Kant is appearance of thoroughgoing determinacy. See *SuB*, 473.

*re et intellectus*,<sup>32</sup> but as the establishing of the unity of the manifold under the principle of the synthesis of the unity of transcendental apperception. Kant shows that the identity of the object is an objectification of the identity of the logical I,<sup>33</sup> which leads us to the next point.

### III

The preceding should make intelligible why Kant can state that *Wirklichkeit*<sup>34</sup> is a modality, that is, a way or mode of how we posit things or, more exactly, of how understanding posits an object of experience. The “we” does not mean the empirical I, but the understanding in general (*Verstand überhaupt*), governed by the principle of the logical I. It is a fundamental doctrine of Kant that the object of scientific experience is not given, but posited. So what is the kind of *Wirklichkeit* that receives its justification through transcendental logic?

(1) The essential feature of this objectivity is that it must allow the formal unity of self-consciousness to preserve and continue itself within it. Kant calls this logically transparent object “nature,” but in a specific sense of the term. Kant distinguishes two aspects of “nature.” First, nature as the sum total of all appearances (*natura materialiter spectata*). This, taken by itself, would be mere ἄπειρον, matter without form. Second, “nature” also means the sum total of all appearances insofar as universal laws govern them (*natura formaliter spectata*). Kant’s Copernican turn demonstrates that these universal laws are necessary positings of the understanding that are constitutive of the

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<sup>32</sup> See also Kant’s remarks on the “*preformation-system* of pure reason” that do not only aim at the naïve realism or empiricism (Locke) on the one side, and Descartes and the “rationalist” tradition up to Leibniz on the other side, but rather is a fundamental critique of the complete preceding epistemology: “in such a case the categories would lack the *necessity* that is essential to their concept.” *CPR*, B168, 265.

<sup>33</sup> Hegel will refer to this standpoint—that of “determining reflection”—in his logic as follows: “*Determinate being is merely posited being or positedness*; this is the proposition of essence about determinate being.” *Hegel’s Science of Logic*, 406.

<sup>34</sup> Which, in Hegel’s terms, means *Realität*. Reality, as opposed to actuality, signifies the “world of appearances” in the Kantian sense.

objectivity of an object in general.<sup>35</sup> This objectivity of the object is its identity or determinacy, which is neither simply given nor based in the object itself qua substance but posited as, one might say, objectivation of the logical I, of general subjectivity. And it is because of this identity that, for example, this tree here and now has not immediately vanished into the Heraclitean flow of sensual perception, but can be determined as a something of a kind. This identity is, according to Kant, a function of the power of judgment, that is, the objectifying determination by subsuming individuals as instances of a general rule or type. So Kant shows that the belief of common sense (in everyday life as well as in science) that there are given, identifiable things has a transcendental origin.

Thus, the objectivity Kant is grounding is explicitly neither the world of the sensory perception nor the φύσις or οὐσία αἰσθητή of the Aristotelian ontology. Necessary knowledge of objects is not possible with regard to a thing in itself, but only with regard to a coherent, contradiction-free, and therefore unequivocally determinable system of appearances. This is nothing other than the object of modern natural science. Kantian objectivity is not an object of possible sense perception but an object of the understanding; it is not single things as substances but the things as appearances, which means only insofar as their determinacy can be explained in terms of their being nothing more than functional elements in a law-governed system of appearances.<sup>36</sup>

For example: the objectivity or identity of water in this sense is not a thing that we can point to in sense perception, but the thought of H<sub>2</sub>O.<sup>37</sup> H<sub>2</sub>O appears in different so-called states of aggregation (fluid, steam, and so on), and this appearance is not contingent but necessary. Ice will predictably melt under certain circumstances. But this means that the identity or determinateness of a given state of aggregation is grounded only in a system of appearances. Ice melts in relation to a heat source. In other words, water as H<sub>2</sub>O has, as its scientific name denotes, its identity not in itself but in the periodic table of elements and the laws of chemical reaction, which in turn are determined within the system of all natural laws.

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<sup>35</sup> As demonstrated in the “System of principles of pure understanding.”

<sup>36</sup> See the step from “perception” to “force and understanding” in Hegel’s *Phenomenology of Spirit*.

<sup>37</sup> See Thomas Sören Hoffmann, *G. W. F. Hegel—Eine Propädeutik* (Wiesbaden: Marix, 2012), 262–63.



It is important to note that in this perspective all phenomena (individuals, particulars) as appearances must not have something like an identity within themselves, an internal or imminent identity which presents itself in the way a thing changes or reacts, as previous ontology conceived it. To put the point more sharply, they are not selves at all, that is, they have no internal self-relation. Rather, they are merely functional elements in a system, and their identity or determinateness is rooted only in this system of appearances. The Leibnizian *principium identitatis indiscernibilium*, which aimed at the *concrete identity* of an individual (in Aristotelian terms, the τὸδε τι), must be regarded as negligible for the object of experience. This is precisely what happens, for example, in generating “objective knowledge” about specific natural laws by means of methodical experiment.

“Nature” in this sense is the world as purely objective objectivation, the modelled reality of the natural sciences. Thus Kant answers the question of the importance of formal logic in relation to objective knowledge as follows: The principles and forms of formal logic provide knowledge only in relation to this form of objectivity.<sup>38</sup> The world of appearance is a world which is established in such a way that the self-identity of the I can preserve itself without contradiction, a world that is logically completely transparent (as opposed to the φύσις of previous ontology, which features a lasting “otherness” insofar as it has been conceived as presence of another “self”).<sup>39</sup>

Now, we must not think that this is only a matter of the scientific worldview. The logic of objectification or identification with which the transcendental logic deals is of course a matter of our everyday life, too. Without this objectification, human beings could not survive biologically. It is the basis of all knowledge which allows us to orient ourselves in the world. We are always trying to integrate the objects we experience into contradiction-free models in order not to lose our mind (the understanding). So we may generally say that transcendental logic demonstrates the conditions of all technical-practical conduct.<sup>40</sup>

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<sup>38</sup> Apart from Kant's foundation of mathematics.

<sup>39</sup> See Thomas Sören Hoffmann, “Gezeigt versus sich zeigende Natur. Eine Skizze im Blick auf das Verhältnis von Labor und Natur,” in *Philosophia Naturalis* 43, no. 1 (2006): 142–67.

<sup>40</sup> This is a central issue for ethics: To what extent can we allow ourselves to regard a person as a mere functional element, which is to say as a means to our ends, as an object?

(2) In showing this, Kant's transcendental logic unveils the hitherto hidden teleological character of formal logic, its imperative character: formal logic is the logic of knowledge for the sake of domination, of control. The goal of modern mathematical natural science is knowledge that can be applied. The transcendental logic shows that this is made possible only because this object, the world of appearance, is not alien but thoroughly constituted by the logical I. There is no principal opacity in the objectivity of the *natura formaliter spectata*. It is a logically transparent world. This enables prognosis, and prognosis enables technical mastery of nature. I can control something completely only if I am able to predict action and reaction a priori. This is the one side, namely, that Kant's transcendental logic shows under which conditions this knowledge of domination is possible. According to the second postulate of empirical thinking, the object of this knowledge alone is actual in a strict sense.<sup>41</sup>

(3) The other side is that Kant shows within the *Critique of Pure Reason* the limitation of the technical-practical form of knowledge and its legitimate sphere of application (we could also say, of instrumental reason). Formal logic cannot be a tool for gaining knowledge of substance in the sense of the traditional ontology, which in Kant has to be regarded as the unknown X. We cannot dominate a thing-in-itself but only the thing as appearance, which means insofar as it can be understood as a functional element in a system according to laws. This object is posited as thoroughly determinable by the understanding.<sup>42</sup> It is of the utmost import to emphasize this side, for already in the *Critique of Pure Reason* Kant clears the way for relativizing the theoretical "instrumental" reason as merely a means to practical reason, which itself has primacy. The proper relation of mere technical and practical reason is articulated in the humanity formulation of the categorical imperative, for example. Technical-practical knowledge is nevertheless a condition of realizing practical reason, for without the determinacy of the object, without identification of something as something, acting that realizes practical reason would not be possible. The third *Critique* will provide the insight that it is the sphere of internal

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<sup>41</sup> *CPR*, B266.

<sup>42</sup> "Erkenntnis bei Kant ist immer Erkenntnis von positiven Gegenständen. Die Erkenntnis besteht in nichts anderem als der Verwandlung des angeschauten Wahrnehmungsgegenstandes in den entweder direkt oder wenigstens indirekt anschaulichen Erfahrungsgegenstand." *SuB*, 70.

finality or self-relatedness which opens up beyond the sphere of knowledge in the precise sense of the *Critique of Pure Reason*. This point will be important to keep in mind when we come to Hegel. We shall now face the limits of transcendental logic.

#### IV

Nietzsche's remarks on logic are of great interest for the enlightenment of the logical form because he questions the self-reliance of logic in general and of formal logic in particular, so as to reveal that there is a hidden relation of formal logic, science, and metaphysics to the domination of life.<sup>43</sup> I shall focus on following remark, which seems not to have received the attention it deserves from contemporary philosophy of logic:<sup>44</sup>

If, according to Aristotle, the *principle of non-contradiction* is the most certain of all principles, if it is the final and most fundamental one upon which all proofs are based, if the principle of all other axioms lies within it: then one ought to examine all the more carefully what it actually *presupposes* in the way of theses. Either, as if it already knew the real from somewhere else, it asserts something with respect to the real, to what is: namely, that opposite predicates *cannot* be ascribed to the real. Or does the principle mean that opposite predicates *shall* not be ascribed to it? Then logic would be an imperative, *not* to know the true, but to posit and arrange a world *that shall be called true by us*.

In short, the question remains open: are the axioms of logic adequate to the real, or are they measures and means to *create* for us the real, the concept 'reality'? . . . But to be able to affirm the former one would, as I have said, already need to be acquainted with what is; and

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<sup>43</sup> A luminous study on Nietzsche's basic concepts and their relation to Kant and Hegel is given by Heinz Röttges, *Nietzsche und die Dialektik der Aufklärung* (New York: De Gruyter, 1972).

<sup>44</sup> Profound accounts on Nietzsche's view on logic can be found in Steve D. Hales, "Nietzsche on Logic," in *Philosophy and Phenomenological Research* 56, no. 4 (1996): 819–35; and in the chapter "Die Wirkung des formellen Denkens und der Verstandeskategorien als Wahrheit," in Günter Abel, *Nietzsche: Die Dynamik der Willen zur Macht und die ewige Wiederkehr* (New York: De Gruyter, 1998), 329–34. Michael S. Green has shown that Nietzsche's account of logic (amongst other topics) is indebted by his reading of the Russian logician Afrikan Spir in *Nietzsche and the Transcendental Tradition* (Urbana: University of Illinois Press, 2002), 87–89.

that's simply not the case. The principle thus contains not a *criterion of truth*, but rather an *imperative* about *what shall count as true*. Supposing there were no identical with itself, such as that presupposed by every logical (including mathematical) principle, supposing A were already an illusion, then logic would have as its presupposition merely *illusory* world. And indeed we believe in that principle under the impression of endless experience which seems continually to *confirm* it. The 'thing'—that is the real substratum of A: *our belief in things* is the precondition of our belief in logic. The A of logic is, like the atom, a re-construction of the 'thing'. . . . By not grasping that, and by making of logic a criterion of *true being*, we are well on the way to positing all those hypostases—substance, predicate, object, subject, action, etc.—as realities: i.e., to conceiving a metaphysical world, i.e., a 'true world' (—but this is the illusory world once again).<sup>45</sup>

(1) Nietzsche conceives formal logic as related to our "belief in things," and it is by means of formal logic that we posit a "thing." We posit identity, a self-identical essence as substrate which we call a "thing." Nietzsche seems to be aware of the fact that the principle of identity has its significance essentially in the positing of objective determinacy, as well as of the connection between the form of categorical judgment (every predicate must have an underlying subject) and its function in the category of inherence-subsistence qua thing-property. Accordingly, Nietzsche supposes that all former metaphysics as well as all exact science are based upon formal logic. Kant would agree. But unlike Kant, Nietzsche stresses that the concepts we build up via logic are sheer positings, hypostases. By "hypostasis" we mean something that is factually ontologically dependent and yet is regarded as if it could exist on its own. Trying to conceptualize actuality conceived as becoming via logic results in one-sided abstractions. This is consistent reasoning: If actuality or life is conceived as becoming, then it cannot be conceived as free of contradiction. Therefore, the model of a world which is free of contradiction amounts to a perversion of actuality or, according to Nietzsche, the expression of the will to dominate life. For this reason, formal logic cannot serve as an *organon* of knowledge of actuality. Presupposing or trying to guarantee the unity

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<sup>45</sup> Friedrich Nietzsche, *Writings from the Late Notebooks*, in *Cambridge Texts in the History of Philosophy*, ed. by Rüdiger Bittner, trans. Kate Sturge (Cambridge: Cambridge University Press, 2003), 157–58. The original version can be found in Friedrich Nietzsche, *Nachgelassene Fragmente. Herbst 1887*, in *Nietzsche Werke. Kritische Gesamtausgabe*, vol. 8 (Berlin: De Gruyter, 1970), 54.

of formal logic and reality is, according to Nietzsche, the path into error insofar it leads us to project mere delusive entities onto actuality.

(2) Although logic leads us to produce hypostases, we—that is, common sense, science, and metaphysics—have the belief that these positings present the actual world; but in doing so, we mistake mere models of actuality, the “metaphysical” worlds, for actual actuality. This reasoning overlaps with Kant: Formal logic cannot serve as a means of gaining knowledge of the thing-in-itself, but only of the thing as appearance, which is contradiction-free. If Nietzsche stresses that one should not think this kind of object one believes in already presents actual actuality, Kant would agree, by saying that this is why he emphasizes the distinction between an appearance and a thing-in-itself. This point is crucial, because forgetting this difference would mean lapsing back into a pre-Kantian account of the relation of formal logic to reality (which prevails today in analytical ontologies), which leads to the absolutizing of formal logic.

(3) In regard to the problem of the absolutizing of formal logic, Nietzsche provides an important insight which goes beyond the horizon of Kant's transcendental logic, namely, that the force of reaction, which is basically the will to dominate life, necessarily destroys itself, for it recoils on itself. This point addresses the dialectic of the absolutizing of the technical-practical, which consists in the domination of the means over the end. For this reason Nietzsche's thought can be regarded as a contribution to the philosophy of technology.

(4) Let us turn to Nietzsche's account of transcendental logic. His central argument can be found in the following remark: To think that we prescribe laws to “nature” would be the summation of a host of errors of understanding (*die Aufsummierung einer Menge von Irrtümern des Verstandes*).<sup>46</sup> Nietzsche regards Kant's transcendental logic to be the very summit of error. Why is this so? It is important to keep in mind two mutually connected things:

(a) A general aspect: Nietzsche, it seems, was not concerned only to overcome the metaphysical standpoint (like Kant). Additionally—and this seems to be a fundamental motive of his critique of Kant's

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<sup>46</sup> See Friedrich Nietzsche, *Menschliches, Allzumenschliches*, in *Nietzsche Werke. Kritische Gesamtausgabe* (hereafter, *Werke*), ed. Giorgio Colli andazzino Montinari (Berlin: De Gruyter, 1967), Aphorismus 19, 37.

theoretical and practical philosophy as a whole—he wanted to go a step further, to elucidate the hidden nihilism in that which Hegel called the philosophy of reflection.<sup>47</sup> In this context one could also think about Nietzsche’s emphasis on the opacity of the self. I think it is helpful to relate this to Hegel’s logic. Nietzsche was not only aiming to prove that being is illusory; he also had a sense, to use Hegel’s words, that seeming itself is seeming. This point overlaps with Hegel. But unlike Hegel, Nietzsche puts all emphasis on the purely illusory character of being in his critique of metaphysics. Hegel would say that Nietzsche stops short at the sheer immediacy of seeming, whereas his logic of essence demonstrates the progressive reacquisition or manifestation of being within the movement of seeming. As to Nietzsche’s critique of Kant, Hegel could argue that it is right to claim that the movement of seeming or reflection will finally lead to the thought that seeming itself is seeming, which means positively that seeming has to be thought of as appearance of the essence. Yet Hegel could also say that Nietzsche’s brilliant hints focus solely on the immediate or negative aspect, namely, the self-dissipation of the standpoint of reflection, whereas his logic of essence tries to reveal the way to actuality. Thus, the only way for Nietzsche to overcome the standpoint of reflection so as to get in touch with actuality within thought (to achieve a nonreductive comprehension of the unity of thought and being) is to skip to the notion of life and stick with it. Life, of course, really does point beyond the standpoint of reflection.<sup>48</sup> But then again, life is only the immediacy of the unity of subject and object, which taken on its own is not sufficient to comprehend human actuality. It is therefore necessary for Nietzsche to stress the significance of prereflexivity, the opacity of the self.<sup>49</sup> (It would be an interesting task to relate the notion of reflection and

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<sup>47</sup> Which is systematically topical in philosophy since Jacobi’s allegation of nihilism regarding Fichte. See Friedrich Heinrich Jacobi, *Über das Unternehmen des Kritizismus, die Vernunft zu Verstande zu bringen und der Philosophie überhaupt eine neue Absicht zu geben*, in *Friedrich Heinrich Jacobi, Schriften zum transzendentalen Idealismus, Werke*, vol. 2, ed. Walter Jaeschke and Irmgard-Maria Piske (Hamburg: Meiner, 2004).

<sup>48</sup> Consider the problems that arise in respect of thinking life as internal finality in the third *Critique* or the significance of the notion life for the early Hegel.

<sup>49</sup> The true self is life as “great reason,” realized as body (Friedrich Nietzsche, *Thus Spoke Zarathustra*, first part, 4), which shall be ultimately intransparent to us.

negativity in Hegel to Nietzsche; it seems to me that Nietzsche's standpoint could be regarded as a result of insisting on the *immediacy* of negativity.)

(b) The second aspect is that due to his account of negativity or reflection, Nietzsche misses Kant's thought. So if Nietzsche argues that prescribing laws to "nature" by the understanding would be the summit of error, he shows that he has apparently conflated "nature" qua thing-in-itself and "nature" qua system of appearances. Of course Kant was well aware that such a form of "prescription" to things-in-themselves would be nonsense. It seems that this misconception of Kant in Nietzsche arises due to the latter's criticism of the standpoint of reflection as ultimately merely a matter of delusion. Kant would dispute this point of Nietzsche's by saying: Appearance in my sense is not a delusion; on the contrary, it is the sphere of strict and objective necessity in knowledge.

(5) This problematic account of seeming or reflection leads to the rise of a contradiction in Nietzsche's own standpoint. On the one hand, Nietzsche suggests that the application of formal logic to actuality leads to sheer hypostases detached from actuality, and even more it is completely misleading in regard to actuality qua life. On the other hand, Nietzsche is one of the few philosophers to comprehend the hidden teleological character of formal logic, for example, in asserting that formal logic is an "imperative, *not* to know the true, but to posit and arrange a world *that shall be called as true by us.*" So this passage suggests that Nietzsche was aware of the character of formal logic as an imperative. Formal logic—as basis of all science—does not lead to absolute nothingness but rather enables us to gain control over the becoming of life, to domesticate, to govern it. Indeed, Nietzsche wants to uncover the construction of our scientific view of the world by means of logic as a mighty tool of domination. Kant would agree with this by responding: Transcendental logic demonstrates exactly the preconditions under which we can gain objective knowledge qua knowledge that may serve to dominate actuality. But Nietzsche, as Kant could carry on, fails to comprehend the notion of appearance. Therefore it must remain a mystery to him as to how playing with sheer hypostases could ever enable us to gain actual power over "nature"—things as appearances. A system of appearances indeed is a modelled actuality. But he overemphasizes the modelling. If it were mere

delusion, it could never have served as a proper means for the force of reaction and resentment. Without a logically shaped system of appearances, the “will to power” would have never been able to realize itself in space and time; self-conscious life could not have preserved itself.

(6) This problem is aggravated by the way in which Nietzsche aims to reduce logic to language. Why do we believe in things and in formal logic? Because this belief is nothing more than a disguised belief in the grammatical structure of our particular and contingent language.<sup>50</sup> Now, Kant could counter this by saying that a “belief in things” is a projection, but a necessary projection. It is rooted in the fact that we can acquire objective knowledge of things as appearances. One could say, the controllability of things as appearances explains why this belief is deeply rooted. That is why we tend to forget the critical difference between appearance and thing-in-itself and regard formal logic as the *organon* of knowledge. Instead, for Nietzsche the final result is the following: “The belief in the categories of reason [purpose, unity, being, M.G.] is the cause of Nihilism—we have measured the worth of the world according to categories which can only be applied to a purely fictitious world.”<sup>51</sup> This is a negation or denial of the logical character of being in general, which expresses itself as linguistic relativism or perspectivism.<sup>52</sup> The theoretical Kant would counter that with perspectivism, one ends up in exactly the spot he wanted to escape from, namely, at Hume’s bundle of perceptions, the becoming of impressions. This standpoint is self-dissolving, and the transcendental logic aims to overcome it. If Nietzsche were right, how could he explain the possibility of technical mastery of nature at all?

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<sup>50</sup> Formal logic has no autonomy, according to Nietzsche, because its forms and principles are relative to the grammar of particular languages. See Josef Simon, “Grammar and Truth: On Nietzsche’s Relationship to the Speculative Sentential Grammar of the Metaphysical Tradition,” trans. Babette Babich, in *Boston Studies in the Philosophy of Science* 203 (1999): 129–51.

<sup>51</sup> “Resultat: der Glaube an die Vernunft-Kategorien [Zweck, Einheit, Sein, M.G.] ist die Ursache des Nihilismus,—wir haben den Werth der Welt an Kategorien gemessen, welche sich auf eine rein fingierte Welt beziehen.“ Friedrich Nietzsche, *Nachgelassene Fragmente*, in *Werke*, sec. 8, vol. 2, p. 291.

<sup>52</sup> The dissipation of the logical in embracing perspectivism can be regarded as the appropriate way of expressing this actuality.



Nietzsche's merit, especially with regard to his account on logic, is to unveil this standpoint as "will to power," which finds its expression as pragmatism, perspectivism, and nihilism. His enlightenment of logic shares fundamental motives with Kant while failing to recognize the necessity of Kant's reflections. In Hegel's terms: Nietzsche's philosophy reflects the logical status of essence. He seeks to elucidate the seeming character of being, but he fails to recognize the progress in the Kantian reflection due to his "metaphysical" premises that tend to a mere abstract negation of the logical form and its necessity.<sup>53</sup> So we have to look for a systematically deeper insight.

## V

Hegel's logic of essence shows the legitimacy of Kant's standpoint as well as how logically to overcome the standpoint of reflection, which is, as Nietzsche has pointed out indirectly, in itself nihilistic. By doing so, Hegel goes beyond Nietzsche and shows how to grasp actuality, neither in a one-sided objective mode (the objectivity which is founded by transcendental logic) nor in a one-sided subjective mode (an actuality which can also be no real self as it is only as immediately fractured into perspectives, its being for others, as in Nietzsche). In order to concretize this reflection, we shall finally draw our attention to Hegel's notion of "actuality."<sup>54</sup>

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<sup>53</sup> Nietzsche's critique is not far from Protagoras's denial of the necessity of the principle of noncontradiction. See Aristotle, *Metaphysics* 4.4–8. It is important to note that Aristotle's argument is neither sidelined, undermined, nor undone by Nietzsche nor by modern nonclassical formal logics (like paraconsistent logic); for first, the "denial" of the principle of noncontradiction is nothing but a technical decision in order to generate a specific functionality of a calculus; and second, every "proposition" in the construction of a nonclassical logic presupposes and recognizes the principle of noncontradiction, since it is not proposing  $a$  and  $\neg a$  at the same time, which would be "the principle of noncontradiction is valid" and, at the same time, "the principle of noncontradiction is not valid."

<sup>54</sup> See the third section of the "logic of essence" in *Hegel's Science of Logic*, 529–71. For an insightful overview on this crucial section, see Hoffmann, *Hegel*, 348–59; for the overcoming of the immediacy of reflection or mediation itself (that is, the standpoint of transcendental reflection), see Stephen Houlgate, "Essence, Reflexion, and Immediacy in Hegel's *Science of Logic*," in *A Companion to Hegel*, ed. Stephen Houlgate and Michael Baur (Chichester:

(1) At first, it must be astonishing to encounter a category called *Wirklichkeit* within a logic. It is one thing to talk edifyingly about actuality, to swear to the reader that something would be the actual actuality, or to give attentive phenomenological descriptions of it; and it is another thing to catch up with actuality within logic. Hegel's logic of essence accomplishes two tasks:

(a) The standpoint of reflection, which corresponds to transcendental philosophy, is consistently thought through to its end;

(b) In doing so, Hegel is the first philosopher to restore and unfold the logical significance of a series of speculative concepts originating from pre-Kantian metaphysics.

(2) As the category *Wirklichkeit* unfolds the content of the Aristotelian concept of ἐνέργεια, we shall enter into Hegel's logic by recalling the meaning of this term.<sup>55</sup> At first, ἐνέργεια (Latin: *actus*, actuality) is opposed to δύναμις (Latin: *potentia*, possibility). This difference could be translated as difference between the inner and outer, force and its expression, or essence and its appearance. The most important thing to notice is that ἐνέργεια is not just one side of the opposition, but the process or activity in which the unity of both sides manifests itself. It is the process of the transformation from real possibility to determinate reality. Actuality, therefore, is neither something merely subjective, nor a mere object (ἔργον), but the process of the realization or instantiation of a subject and an object. Accordingly, actuality has to be thought of as the presence of self-relatedness. The self, οὐσία, is not a "backworld," but the tendency toward a definite individual appearance, an appearance that presents a self (οἰκείωσις).

(3) With this in mind, let us turn to Hegel, who defines *Wirklichkeit* as the unity of essence and existence. This now is a matter of existence, which is no longer sheer positedness, but a being on its own terms.<sup>56</sup> This means that actuality is not a mere external objectivity determined by reflection, namely, an appearance solely of natural laws, but the process of self-determination that manifests itself (as opposed to the doctrine of the opacity of the self in Nietzsche too). Where do we

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Wiley-Blackwell, 2011), 139–158. The entry in Michael Inwood, *A Hegel Dictionary* (Oxford: Blackwell, 2003), 33–35, remains unhelpful to open up the systematic significance of this concept.

<sup>55</sup> See Aristotle, *Metaphysics* 9.6.

<sup>56</sup> Hoffmann, *Hegel*, 350–54.

encounter actuality? In the presence of a self-relation. In thinking this Aristotelian thought, Hegel does not fall behind Kant, but shows the solution to the main unresolved problem in Kant, namely, how to get logically to the actual I, which is not a pure principle but the unity of consciousness in general and the individual. This demonstrates the thought that actuality is to be thought of as internal reflectiveness (inwardness) of existence, which, as posited, will be the concept (*Begriff*). Now, self-determination, self-relation means that something is an identity of opposed moments. But this is a contradiction. Thinking actuality does not mean to avoid but to resolve contradictions. That is why Hegel emphasizes that everything actual has contradiction within itself. Avoiding contradiction would be the attempt to establish an unambiguous account of actuality by trying to tear apart the opposed sides (inner–outer, essence–appearance, and so on). In contrast, Hegel shows that the actual is self-relation, and this self-relation is the positing and dissolving of contradiction (for example, as self-movement, self-preservation, self-determination). Resolving contradiction means that the opposed sides are thought of as mere moments of the self-movement (reflexivity) of the actual being. Every concept involving the term “self” reflects actuality and has contradiction in itself. However, as long as the objective validity of formal logic remains an unchallenged presupposition, actuality in Hegel’s terms is nonsense.

(4) How can we then comprehend actuality? Strictly speaking, one cannot point to it or refer to actuality as something of a kind, because referring implies the difference of reflection between that which determines and that which is determined. Therefore, Hegel explains actuality at first as the absolute, which means not being in relation to something else. Actuality is what presents itself, it is self-presentation, immediate manifestation.<sup>57</sup> Therefore, comprehending something in its

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<sup>57</sup> Heidegger’s motive to renovate the concept of λόγος can be regarded as an attempt to overcome the standpoint of reflection and its modelled objectivity so as to think actual being. The λόγος is not a structure, a means for determination and control, but the medium of the “revealing of something” in its truth—in and as language (see Martin Heidegger, *Logic: The Question of Truth*, trans. Thomas Sheehan [Bloomington: Indiana University Press, 1995], 6–7; see also Ewald Richter, *Heideggers Frage nach dem Gewährenden und die exakten Wissenschaften* [Berlin: Duncker & Humblot, 1992], 104). Of course, both λόγος and language cannot be grasped properly in the sphere of the logic of essence. In Hegel’s terms, the proper logical *topos* of language is

actuality does not mean generating unequivocal determinacy or objectifying. Rather, it is knowing which interprets something as presenting a self. Actuality is not a possible object of scientific experience in Kant's terms, or a *Tatsache in Sachverhalten*, as Wittgenstein puts it in the *Tractatus*, but an event (*Ereignis*). This requires us to overcome the interest toward this being and to exercise a theoretical perspective (*θεωρία*), which means letting it be or present itself.

(5) Here we find the limit of transcendental logic: Actuality in this sense cannot be justified in Kant's transcendental logic. The reason is that transcendental logic is nothing but the endeavor of substantiating the objective validity of formal logic, its principles (a) and forms (b):

(a) The boundaries of knowledge, according to Kant, are the boundaries of the determining power of judgment or of the objective validity of the principle of noncontradiction. Transcendental logic presupposes the objective validity of this principle. The objectivity that is justified by Kant is just the object insofar it can be regarded as free of contradiction, as posited as an unequivocal element within a system of appearances. This is why Kant, who departs from oppositions and equally sees the necessity of a unity of the opposed sides, encounters his unresolved problems.

(b) As transcendental logic is a logic of the objectifying determination, it must regard the form of judgment as paramount in view of knowledge. The "transcendental analytic," which functions as the logic of truth, builds upon the form of judgment. Hegel will point out that the form of judgment is inappropriate to present the speculative, which means the logical form as movement of the mediation of opposed determinations, for example, actuality as self-relatedness.<sup>58</sup>

I come to a close. From Hegel's point of view, transcendental logic substantiates only an abstract moment of actuality. Kant's

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the idea as "Entsprechung," which is the living *λόγος*. See Theodoros Penolidis, "Logos as Theoria: Notes on Hegel's concept of the 'speculative,'" in *Synthesis Philosophica* 43 (2007): 157–94.

<sup>58</sup> See Kurt Walter Zeidler, "Syllogismus est principium Idealismi," in *Dialektische Logik. Hegels „Wissenschaft der Logik“ und ihre realphilosophischen Wirklichkeitsweisen*, ed. Max Gottschlich and Michael Wladika (Würzburg: Königshausen & Neumann, 2005), 239–51.

transcendental logic elucidates how formal logic has always been a logic of technical-practical knowledge. Transcendental logic is the logic of our technical conduct, which shows what it must presuppose and how we must regard actuality—namely, as world of appearances—if we want to gain knowledge that serves as a means of domination. But we must not forget that Kant enlightens us about the finitude of this standpoint in the *Critique of Pure Reason* and the other two *Critiques*. Practical reason, freedom, the living, the experience of beauty, as well as teleology, all have to be conceived as forms of self-relatedness. As such, these forms cannot be conceived as free of contradiction. The other *Critiques* approach actuality in the Hegelian sense—but in a logically unfounded way. That is why Kant is eminently topical. The spirit of our age is imbued with the myth of technology in all domains of our life. This myth is the one-sided, abstract enlightenment,<sup>59</sup> the totalitarianism of the standpoint of utility or finite purposiveness.<sup>60</sup> Kant's transcendental logic is the first inner-logical step of the enlightenment of this myth.<sup>61</sup>

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<sup>59</sup> See Hegel's critique of the Enlightenment in the *Phenomenology of Spirit*.

<sup>60</sup> Which is the basis of the primacy of the economic system over politics in the present age. The "system of needs" (Hegel) is the system of realized finite purposiveness within the realm of freedom, which seems to be regarded as a secularized "kingdom of ends."

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