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Movements of the World: The Sources of Transcendental Philosophy

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This new dimension of post-Kantian thought must now be made to bear fruit beyond the most general formulations of the basic idea, with the twofold aim of providing foundations for natural inquiry and of securing philosophy a real basis in nature.¹

A great difference is made to contemporary accounts of transcendental philosophy if the question is raised as to how far down its inquiries into the sources of cognitions extend. It is true that the transcendental deduction is designed to reset the orbit of metaphysics around experiences rather than things; and although there are exceptions, neither Kant nor his successor transcendentalists ceased to extend the inquiry into the ultimate grounds of cognition insofar as these are made possible not by objectives, but by what exceeds their being, that is, their formation. Indeed, it is in thinking sources, in *descendence*, that transcendental philosophy most achieves its objects.

Transcendental philosophy does not consist only in the *derivations* of concepts legitimately applicable in experience and in demarcating the thresholds beyond which epistemological title is accordingly forfeit. It is true that transcendental derivability rearticulates the problem of ground such that it no longer subtends, as it did for Leibniz, the ascent from physics to metaphysics,² but takes the *plane* thus achieved to supplant the *depth* from which it was raised, and to ground the series of now only appearing natures on an *Abgrund*, an abyss or the unground.³ Yet "reason demands the unconditioned" (KRV A564/B592)⁴

¹ Klaus Stein, Naturphilosophie der Frühromantik (Paderborn: Schöningh, 2004), 25.

² Leibniz, *Principles of Nature and Grace*, §7: "So far, we have spoken as simple *physicists*; now we must rise to *metaphysics*, by making use of the *great principle* . . . that *nothing takes place without sufficient reason*" in trans. Roger Ariew and Daniel Garber, in G.W. Leibniz *Philosophical Essays* (Indianapolis: Hackett, 1989), 209-210.

³ "Unconditioned necessity, which we so urgently require as the last bearer of all things, is for *human* reason the true abyss [*Abgrund*]", Immanuel Kant, *Critique of Pure Reason* (KRV), trans. Norman Kemp Smith (London and New York: Macmillan, 1929) cited according to the A/B edition pagination as per standard, at KRV A613/B641. Otherwise, Kant's works are cited according to

that is necessary if grounds are to be thinkable at all. Ground cannot 'precede' the grounded since it cannot, by definition, be an element of experience, and only such elements can appear temporally ordered. But rather than concluding ontological nullity from epistemological partition, it is only by "carrying the empirical synthesis [of conditions] as far as the unconditioned" that reason "is enabled to render it absolutely complete; and the unconditioned is never to be met with in experience, but only in the idea" (KRV A409/B436). No deduction of grounds can achieve what reason demands, but reason cannot cease demanding it. Nor without the idea of an unconditioned ground can grounds be identified at all, since a ground is only a ground if it has a consequent, but not if it is itself consequent upon something else. "Absolute completeness" in the synthesis of conditions is therefore possible only on the basis of the transcendental idea which is nothing for experience. Accordingly, as it is the purpose of the antinomies to show, completeness in objective conditions of the possibility of objects cannot be achieved. By allocating the parts of judgments to their originating faculties and to transcendental ideas, transcendental logic is not equivalent to the distribution of epistemological title or to answering the question quid juris, since it divides the unconditioned from the conditioned, into what can and what cannot be synthesized into spatiotemporal objects. Accordingly, the distribution effected by transcendental logic extends the conditions of possibility which, as the paralogisms demonstrate, cannot be *subjectively* completed. Neither, as the Antinomies symmetrically show, can objective conditions be completed. What therefore underpins incompleteness is unconditioned; or, incompleteness is absolute for transcendental philosophy.

Being unconditioned, no experience thereof is possible. This means in particular that the role of the unconditioned ground of all determination cannot be schematized as prior or posterior to the series of conditions within which alone time has purchase. Nor therefore can conditions be schematized as accidents of a basic substance, nor again as standing in any causal relation to antecedents, since this would be to apply the understanding's pure concepts of relation—substance and accident, along with mechanical and ultimately reciprocal causality—to a domain to which sense has no access. It is for this reason that the transcendental turn in philosophy has been considered a subjectivist supplanting of the 'dogmatic' concept of ground, a metaphysics capable of abandoning the temporal and causal depth from which objects emerge. It is from this that the emphasis on "making" (Fichte), "manufacture" (Kant) or on the transcendental as a "new dimension" (Husserl)⁵ becomes focal both for practical and speculative transcendentalism.

Kants Werke, Königlich Preußische Akademie der Wissenschaften (AK), 29 vols (Berlin: de Gruyter, 1902).

⁴ See also Kant, *Critique of Judgment*, hereafter KUK, trans. Werner S. Pluhar (Indianapolis: Hackett, 1987), AK V, 401: "Reason is a power of principles, and its ultimate demand aims at the unconditioned."

⁵ Fichte claims the core attitude of transcendental philosophy is "the world is something made." Johann Gottlieb Fichte, *System of Ethics*, hereafter *Ethics*, trans. and eds. Daniel Breazeale and

Notwithstanding the ubiquity of these practicist or productivist accounts, the "descendent" dimension, the pursuit of grounds, remains a vital element of transcendental philosophy, and involves transcendental philosophy in a systematic inquiry into causes that leads, ultimately, from metaphysics back to physics. Thus it leads on the one hand to the system of incomplete or regulative reciprocity presented as organic form in KUK § 65-6, where causes are reciprocally effects and effects causes, forming a series maintaining this "dependence both as it ascends and as it descends" (KUK AK V, 372).⁶ On the other hand, it leads to the system of the complete community of force and activity 'deduced' as the ether in the Opus postumum (62ff, AK XXI, 206ff). Yet Kant's "second comment" on the table of categories to the categories of relation (KRV B110-111) had already laid the groundwork for both, or set reciprocity down as the Urform of all philosophy, according to Schelling's reading of it.⁷ The problem is this: either causal reciprocity goes all the way down, remaking the cosmos into the Platonic "cosmic animal;" or it is "regulatively" limited, as Kant maintains in KUK, by how we must think of organic beings; or again it is constitutively limited, as Fichte, Kant's self-appointed heir in transcendental philosophy, seeks to show in 'Propositions for the Elucidation of the Essence of Animals.³ Yet animalization is not the only possible consequence of extended reciprocity. Kant's 'Ether Proofs,' for example, hypothesize a dynamic reciprocity of force and activity as the possibilizing condition of our acting in the world, albeit at the cost of antinomizing time: either complete reciprocity of cause and effect eliminates priority and posteriority altogether; or the ascendingdescending reciprocity series hypothesized in KUK has no beginning or end. In both cases, natural history becomes a geography of arrested time.⁹ "True history is nothing but a continuous geography" (AK IX: 161).

Yet since transcendental philosophy originates from the project of the *Universal Natural History* and from the "fruitlessness" of "all attempts to prove the principle of sufficient reason" (KRV A783/B811), we take transcendental philosophy to be the attempt to complete the former, cosmogonic project given

Günter Zöller (Cambridge: Cambridge University Press, 2005), 334. Kant writes, "He who would know the world must first manufacture it." Immanuel Kant, *Opus postumum*, AK XXI, 41, hereafter OPP, trans. Eckart Förster (Cambridge: Cambridge University Press, 1993), 240. Husserl discusses the transcendental as Kant's "new dimension" in Edmund Husserl, *The Crisis of European Science and Transcendental Phenomenology*, hereafter *Crisis*, trans. David Carr (Evanston: Northwestern University Press, 1970), 11, 8-121.

⁶ Kant provides the classic statement of organic reciprocity at KUK, AK V, 374: In thinking of a "natural purpose" we must "think of each part as an organ that *produces* the other parts (so that each reciprocally produces the other," and constitutes "an organized and a self-organizing being."

⁷ F.W.J. Schelling, "On the Possibility of a Form of all Philosophy," in *Schellings Werke* (hereafter SW), 24 vols., ed. K.F.A. Schelling (Stuttgart and Augsburg: Cotta, 1856-61), band I, 107; trans. Fritz Marti, in *The Unconditional in Human Knowledge* (Lewisburg: Bucknell University Press, 1980), 52.

⁸ Fichte, "Sätze zur Erläuterung des Wesens der Thiere," in *Fichtes Werke*, ed. I.H. Fichte, hereafter W, 11 vols (Berlin: de Gruyter, 1971), at W 11, 362-7.

⁹ In his 1802 *Lectures on Geography*, Kant writes "true history is nothing but a continuous geography" (AK IX, 161).

the latter obstacle, the indiscoverability of ground. This is why Kant insists that "in transcendental philosophy, the only questions to which we have a right to demand a sufficient answer bearing on the constitution of the object, and from which the philosopher is not permitted to excuse himself on the plea of their impenetrable obscurity, are the cosmological" (KRV A478/B506).

These cosmological-epistemological concerns recall Schelling's accounts of transcendental philosophy's "derivative" character with respect to the philosophy of nature which alone is capable of grounding it. "There is an idealism of nature, and an idealism of the I. To me, the former is the original, and the latter the derivative," he writes, the reason for which "lies in things" (SW IV, 83-4).¹⁰ From Fichte to McDowell, protests against naturalism in philosophy have assumed that were it conceded that nature precedes consciousness, or that "it is not because there is thinking that there is being, but because there is being that there is thinking,"¹¹ then the transcendental project, the hallmark of philosophical modernity, must be abandoned. I contend that such a view stems from an insufficient naturalism, since for any such position, either all existents are instances of nature, or they are not. In the latter case, naturalism affirms itself ontologically parochial and so on its own testimony cannot provide a complete account of being. If it is claimed that any existent not part of nature does not therefore exist *in reality*, then such a naturalism finds itself in the odd position of affirming a domain of existents that have it in common that they do not exist. Accordingly, the only adequate naturalism must be able to account for all domains of being, including the transcendental. Our question therefore is what a naturalistic account of the transcendental must look like. Moreover, since philosophers are more accustomed to considering transcendental philosophy as proto-phenomenological (Husserl), as epistemology (Allison, Korsgaard)¹² or as reducibly practical (Fichte, Brandom), recasting it in terms of the twin demands for (a) the unconditioned ground, and (b) sufficiency in explanations of object constitution with cosmological scope, seeks to reopen the naturalistic and ontological dimensions of that philosophy to contemporary scrutiny. In doing so, moreover, we will present transcendental philosophy, following Ernst Cassirer,

¹⁰ It is this repeatedly emphasized difference that Hegel omits from his symmetrical, antecedenceindependent account of Schelling's two "grounding sciences" in the *Differenzschrift*, Trans. Walter Cerf and H.S. Harris, *The Difference Between Fichte's and Schelling's System of Philosophy* (Albany: SUNY, 1977), 161: "In transcendental philosophy, the subject, as intelligence, is the absolute substance and nature is an object, an accident. In the philosophy of nature, the absolute substance is nature, of which the subject, intelligence, is only an accident. Now the higher standpoint is not one that suspends one or the other of the two sciences, and asserts that the subject alone, or the object alone is the Absolute. Nor is it a standpoint which mixes the two sciences together." That Hegel's analysis here proceeds by way of the first of the categories of relation substance and accident—provides an index of his own extension of reciprocity to nature and transcendental philosophy, betraying the fundamentality of transcendentalism for him.

¹¹ F.W.J. Schelling, *The Grounding of Positive Philosophy. The Berlin Lectures*, trans. Bruce Matthews (Albany: SUNY, 2007), 203n (SW XIII, 161n).

¹² For a discussion of epistemological as opposed to ontological accounts of Kant's transcendental philosophy, see Eric Watkins, *Kant and the Metaphysics of Causality*, hereafter *Causality* (Cambridge: Cambridge University Press, 2005), 317-326.

as the attempt to "attain knowledge of the forces that generate this knowledge and have brought it forth."¹³

Three Forms of Transcendentalism

From Kant may be derived three accounts of transcendental philosophy. The first presents that philosophy as answering the question quid juris or deducing the entitlement of a judgment to empirical application in accordance with the originating faculty. It asks "of the origin of the modes in which we know objects, in so far as that origin cannot be attributed to the objects" (KRV A55-6/B80). This is a grounding account of transcendentalism, as it posits a sequence of grounds that always terminate in the transcendental ideal, or the concept of an absolute ground.¹⁴ As Kant says (KRV A566/B594), "the existence of appearances, which is never self-grounded, requires us to look around for something different from all appearances, that is, for an intelligible object in which this contingency may terminate." It is also a heterogeneity-preserving transcendentalism, insofar as an absolute ground can never be in principle available to experience and the schematization of which would therefore fall foul of transcendental philosophy's proscription of transcendent or dogmatic claims. As a consequence of this division, nature, in so far as it is phenomenal, is raised above what grounds appearances, which ground must accordingly be other than nature; what grounds nature is, moreover, "an abyss for human reason" so that, taken strongly, the unground of human reason is the ground of a nature that is now phenomenal only, transfigured into an accident of the subject. The heterogeneity so preserved therefore severs nature from its appearing and its causing.

Accordingly, transcendental logic, which has as its function to consider origins as arising other than from objects, subjects questions of grounds to transcendental relocation in order that they can no longer be uncritically affirmed

¹³ See Ernst Cassirer, *The Philosophy of Symbolic Forms*, vol. 4, *The Metaphysics of Symbolic Forms*, trans. John Michael Krois (New Haven CT: Yale University Press, 1996), 150.

¹⁴ For a discussion of the concept "absolute ground" in Kant's pre-critical and critical works, see Paul W. Franks, All or Nothing: Systematicity, Transcendental Arguments and Skepticism in German Idealism, hereafter All or Nothing (Cambridge MA: Harvard University Press, 2005), 35-43, 204-211. Franks notes that Kant's most discussed transcendental arguments-the Transcendental Deduction and the Refutation of Idealism-"do not argue for an unconditioned condition," although the deduction of freedom in the Critique of Practical Reason does (All or Nothing, 207). But he also notes (p. 43) Kant's overt articulation of the question in the first Critique: "If one asks . . . whether there is anything different from the world which contains the ground of the world order . . . then the answer is: without a doubt" (KRV A696/B725). Franks here interprets Kant as arguing that, "the requirement that genuine groundings terminate in an absolute is an unavoidable demand of reason," yet this seems to contravene the ban on dogmatic assertions concerning what does not figure in experience (All or Nothing, 46). The solution, argues Franks, is that Kant can assert that such an absolute ground exists, but not what it is or in what way. It is difficult, however, to see how asserting that X exists necessarily does not amount to characterizing how it exists. Despite this, it is clear that the concept "transcendental ground" plays a role in Kant's critical speculative philosophy as well as in practical.

as empirical or dogmatic. Moreover, the division between unconditioned and conditioned grounds, and the *reducibly transcendental* concept furnished by the former and the interminably regressive series entailed by the latter, withdraws causality from the domain of 'natural history' in order to distribute it between antinomy-generating experience and blind, rational assertion. Thus critical transcendentalism works ultimately, as the Copernican revolution expressly signalled, to replace objects with the subject as the ground *qua* insuperable source of rational legitimacy.

This is especially the case, as Robert Brandom has claimed,¹⁵ insofar as such a subject articulates such necessity simply by a commitment to reasoning entailed by the fact of reasoning. In reasoning, that is, a subject seeks to integrate the reasons for an action or judgment into the range of other reasons and commitments that subject claims to hold. To do so is, Brandom claims, "to synthesize an original unity of apperception."¹⁶ Insofar as something *original* is, at first sight at least, not something that requires prior synthesis, the cited characterization further indicates the "recollective" function of reason he calls the "rational reconstruction" of the community of reasons such as Brandom finds recommended in Hegel.¹⁷ Accordingly the subject's apperceptive capacity is not so much "original" in the sense of first as it is originative or productive of precisely those integrative and recollective synthesis which, as a 'spontaneous' *act*, is the ground in turn of the subject's actual apperceptions, or 'realizations' of this fact. Reason is a commitment to reasons evident only in reasonings which are responsible, the subject realizes, for the subject articulated as related claims and commitments.

While Brandom's version of transcendentalism overtly acknowledges its debt to Kant and Hegel, its rational bootstrapping has a Fichtean genealogy. For Fichte as for Brandom, the primacy of the practical is evident not only in the content of overtly held normative commitments, but also in the rational practises that underlie such commitments. Attending reflectively to the constitution of such practises, Fichte demonstrates, entails the foundations of transcendental philosophy lie not in anything given, but only in what is made. This *productivist* transcendental philosophy is exemplary of philosophical activity in general as Brandom and many other idealists consider it.¹⁸ One paradigm of this is provided in Fichte's account of the 'Duties of the fine artist' in *The System of Ethics*,¹⁹ where the artist is said to "make the transcendental point of view the ordinary point of view." The practical lesson concerning transcendental philosophy the artist furnishes is the transcendental lesson that "the world is something made"

¹⁵ What follows glosses pp. 9-16 of Robert Brandom, *Reason in Philosophy* (Cambridge MA: Harvard University Press, 2009), hereafter *Reason*.

¹⁶ Brandom, *Reason*, 14.

¹⁷ Ibid., 16

¹⁸ See the discussion of Brandom and the forms of idealism occurring in contemporary philosophy in Jeremy Dunham, Iain Hamilton Grant and Sean Watson, *Idealism. The History of a Philosophy* (Stocksfield: Acumen, 2011).

¹⁹ Johann Gottlieb Fichte, *System of Ethics*, hereafter *Ethics*, trans. and eds. Daniel Breazeale and Günter Zöller (Cambridge: Cambridge University Press 2005).

and only from the ordinary point of view is it given. The artist therefore takes made-ness as given, as should the transcendental philosopher.²⁰ This differs greatly from the role of art in Schelling's philosophy, for which art must equally withdraw from and return to nature²¹—where it must take leave of the blind operation of the living idea in order to form something which then becomes, to use Malevich's concept, an "additional element" in nature, a new component in a suprematist ontology.²² At the same time, the emphasis this version of transcendental philosophy places on its *productivity* opens another dimension of that philosophy's important and underexploited novelty.

While these two accounts of transcendental philosophy dovetail to a certain extent, the first terminating in a disjunction and the second in a production monism, a third transcendentalism shares the grounding agenda of the first with the production monism of the second. It is one that, in Kant's own philosophy, sought to articulate the disjunction between the objects of speculative and those of practical philosophy as occupants of one and the same dynamic field. Although explicitly discussed most extensively in the work known by Kant's contemporaries as Transition from the Metaphysical Foundations of Natural Science to Physics but known since 1920 as the Opus postumum,²³ its provenance is evident in changes in Kant's philosophy of chemistry signalled in his introduction to S.T. Sömmering's Über das Organ der Seele (1796).²⁴ Crucially, it reconceives the movement of the transcendental not as vertical flight from immanence, so to speak, nor as orbit, but rather as transition. In place of the search for grounds or for a substrate, Kant recasts transcendental philosophy as the *production* of transitions; instead of bodies being accorded primacy both in his physics and metaphysics, they are considered generated, late products of forces. Such a recasting has important consequences regarding the categories of relation in the first *Critique*'s table of categories (KRV A80/B106), as we shall see. For the moment, however, we note that transition transcendentalism asserts the community of force and activity as necessary to a systematic metaphysics, and generates the concepts necessary to such a community in order to form experience such that from it such a community is derivable in turn. It thus

²⁰ Fichte, *Ethics*, 334.

²¹ Compare Schelling's account in his lecture "Concerning the Relation of the Plastic Arts to Nature," trans. Michael Bullock in Herbert Read, *The True Voice of Feeling* (London: Faber and Faber, 1957), 321-364 (SW VII, 289-330).

²² See Kasimir Malevich, "An Introduction to the Theory of the Additional Element in Painting," in *The World as Non-Objectivity*, ed. Troels Andersen, trans. Xenia Glowacki-Prus and Edmund T. Little (Copenhagen: Borgen, 1976), 147-194.

²³ Schelling gives this title in his 1804 obituary for Kant, SW VI, 8. It continued to be used until Erich Adickes' *Kants Opus postumum* was published in 1920 as *Kant-Studien Ergänzungsheft* 50, trans. Eckart Förster, *Opus postumum* (OPP) (Cambridge: Cambridge University Press, 1993).

²⁴ AK XII, 33-5. See also Mai Lequan, *La chemie selon Kant* (Paris: Presses Universitaires de France, Alexander Rüger, 1995); idem, "Brain Water, the Ether, and the Art of Constructing Systems," in *Kant-Studien* 86, 26-40; Michael Friedmann, *Kant and the Exact Sciences* (Cambridge: MA, Harvard University Press, 1992), 264-290; and Martin Carrier, "Kant's Theory of Matter and His Views on Chemistry," in Eric Watkins, ed., *Kant and the Sciences* (Oxford: Oxford University Press, 2001), 205-230.

integrates the bootstrapping productivity hitherto ascribed solely to pure practical reason, and later to be exploited by Fichte and Brandom alike, with a solution to the problem of grounding that drives the first *Critique*. In so doing, transition transcendentalism offers an alternative to that production transcendentalism for which, as for Brandom, "all transcendental constitution is social institution."²⁵ without sacrificing antecedent nature to the epistemological impenetrability that critical transcendentalism's division of grounds condemns it. The cost of this accommodation, however, is that transcendental philosophy must now rest content with reason and nature settling symmetrically opposite one another such that neither may be derived from the other, forsaking therefore the derivation quest that underlies transcendental logic. As Brandom has it "the insight that even natures have histories" must be balanced by "rationality . . . imposing the obligation to construe histories as revelatory of natures."²⁶ The question, therefore, is whether transition transcendentalism could in fact resolve the problem of the relation of phenomenal to non-phenomenal nature, a problem that has given currency to transcendental approaches amongst philosophers of quantum mechanics,²⁷ given that it entails the elimination of the question of origin from transcendentalism's remit. What this means, in short, is that the transition between physics and metaphysics is accomplished at the cost of causal relations underlying reason. To this extent, transition transcendentalism remains a *critical* solution to the problem of nature and freedom: nature, that is, remains phenomenal not solely such that time and space follow and therefore causality takes place only within the field of appearance, but also such that it is *felt*. Transition transcendentalism, therefore, expands the domain of the aesthetic to furnish the foundations of reciprocity or community between activity and force. As a result, objects and subjects become reciprocally constitutive such that there neither are nor can be entities or events without their being capable in principle of impinging upon the sensitive faculties of a subject, just as the "formal principles of the phenomenal universe . . . are the schemata and conditions of everything sensitive in human cognition" (AK II, 398).²⁸

Kant's account of cosmological as aesthetic cognition will be echoed in two alternative solutions Cassirer will give in the late 1920s to the problem of form, to the problem, that is, of "how it is possible for the form of being to be pictured in the form of knowledge:" either by an analytic relation obtaining

²⁵ Brandom, Articulating Reasons. An Introduction to Inferentialism (Cambridge MA: Harvard University Press, 2000), 34.

²⁶ Reason, 112.

²⁷ See, for example, Bernard d'Espagnat, *Physics and Philosophy* (Princeton: Princeton University Press, 2006) and the references cited by Gabriel Catren in "A Throw of the Quantum Dice Will Never Overturn the Copernican Revolution," in *Collapse* V (2009): 453-499, especially M. Bitbol, P. Kerszberg and J. Petitot, eds., *Constituting Objectivity: The Transcendental Approaches of Modern Physics* (Berlin: Springer, 2009).

²⁸ As Kant says in his "Inaugural Dissertation," trans. and ed. David Walford and Ralf Meerbote, *Theoretical Philosophy 1755-1770* (Cambridge: Cambridge University Press, 1992), 391, hereafter *Theoretical*.

between them, as in Parmenides' "thinking and being are the same,"²⁹ or by the causal or inductive series typified by Empedocles' "We see Earth by means of Earth, Water by means of Water," or by the knowing being a part of the known.³⁰ Regardless of which version of identity Kant had assumed in the *Inaugural Dissertation*, since all of these three accounts of the identity of cosmos and logos, of nature and reason, whether *analytic*, *inductive-causal*, or *mereological-participatory*, are precisely rejected in the first *Critique*, what must be explained by transcendental philosophy is *how they come to be divided* in the first place.³¹

From the Categories of Relation to the Problem of Form

In the B edition of KRV Kant adds two comments concerning the Table of Categories and its relation to the "scientific form" of philosophy, or the "*momenta* of a projected speculative science," he considers that table to provide. The Second Comment notes that "the third category in each class always arises from the combination of the second category with the first."³² Thus, in terms of the class of *quality*, Reality is primitive, Negation derived, and Limitation their product; similarly, Totality is the product of Plurality derived from Unity; and Community or Reciprocity the product of Substance and Accident and Cause and Effect. The categories of Modality are antinomic, and do not concern us here.³³

²⁹ I use the simplest translation of Parmenides' Fragment B3, as offered by E.D. Phillips, "Parmenides on Thought and Being," *Philosophical Review* 64 (1955): 546-60, as avoiding either an objectivist ("it is the same thing that can be thought and that can be") or the subjectivist ("to think is the same thing as to be") accounts. See F.M. Cornford's discussion of this problem in *Plato and Parmenides* (London: Routledge and Kegan Paul, 1939), 33-4 and 34n.

³⁰ Empedocles Fragment 109, as cited and discussed by Ernst Cassirer, *The Philosophy of Symbolic Forms*, vol. 4, *The Metaphysics of Symbolic Forms*, trans. and eds. John Michael Krois and Donald Phillip Verene (New Haven: Yale University Press, 1996), 194-5. Schelling first advances Empedocles' thesis as both causal and inductive, characterizing the principle as "like produces like," in his 1806 "Preliminary Characterization of the Medical Standpoint on Naturphilosophical Principles," SW VII, 281. See also F.W.J. Schelling, *Philosophical Inquiries into the Nature of Human Freedom*, trans. James Gutmann (Chicago: Open Court, 1986), 8, hereafter *Freedom*, where the emphasis is on the roots of recognisability lying in nature: "Whosever takes physical theory as his point of departure . . . knows that the doctrine 'like is recognized by like' is a very ancient one. . . . But, alas, those who are unsympathetic towards science traditionally regard it as a kind of knowledge which is quite external and lifeless like conventional geometry."

³¹ This is the problem discussed at length in the "Introduction" to Schelling's *Ideas for a Philosophy of Nature*, trans. Errol E. Harris and Peter Heath (Cambridge: Cambridge University Press, 1988), 9-42 (SW II, 11-56), hereafter *Ideas*.

³² KRV B110. See Schelling own remarks to this effect in his discussion of Plato's concept of cause in his 1794 *Timaeus*, ed. Hartmut Buchner (Stuttgart Bad-Canstatt: Frommann-Holzboog, 1994), 27-8, 69-72, and in his "Treatise Explicatory of the Idealism in the *Science of Knowledge*," trans. Thomas Pfau, in *Idealism and the Endgame of Theory. Three Early Essays by F.W.J. Schelling* (Albany: State University of New York Press, 1994), 71-2 (SW I, 356-7).

³³ See my "Prospects for Post-Copernican Dogmatism: The Antinomies of Transcendental Naturalism," *Collapse* V (2009): 415-451, for a discussion of the categories of modality and their importance in post-Kantian philosophy.

We owe to Schelling the "astute point"³⁴ that the categories of relation— Substance and Accident, Cause and Effect, and Community or Reciprocity (KRV A80/B106)—are less one class of categories amongst others than the original from which the others are derived. In consequence, Schelling claims that the "forms of thought" identified in the Table of Categories can in fact be reduced to one *Urform* which "grounds all the others."³⁵ Two questions will arise from this: first, how far from Kant's understanding of the categories is Schelling's intervention? And second, what consequences follow from the account Schelling makes explicit?

 Kant's account of the pure concepts of the understanding in general (KRV A77-80/B102-5) does not present them as given but as products of *pure syntheses* following an *order*. A synthesis is pure when the manifold thus synthesized contains nothing empirical, as for example the manifold of space and time. It is an "effect [*Wirkung*]" of the imagination. There is a distinct order to pure synthesis: *first* must be the manifold of pure intuition; *second* the imagination synthesizes this manifold, that is, "goes through it in a certain way, takes it up, and connects" it; "the concepts that give *unity* to this pure synthesis" are *third*, and "consist only in the representation of this necessary synthetic unity." The B edition comment therefore implicates this synthetic order in the production of the pure concepts of the understanding themselves. It is as though the syntheses are themselves derived from an analysis of the pure manifold of space (distribution and individuation) and time (sequence).

In other words, the Second Comment follows through the implications of the necessity of synthesis in the production of any cognition whatever. Schelling is correct in ascribing fundamentality to the Categories of Relation exactly and only if the syntheses can be understood causally, exactly as the description of synthesis as an "effect [*Wirkung*] of the power of imagination" (KRV A78/B103) does. In this regard, Kant produces the outline of a *transcendental account of transcendental concept production*. That is, if the pure manifold of intuition is itself sufficient to furnish the material for the categories, then their synthesis produces cognition of the formation of forms of knowing (concepts), rather than knowledge of experience, or of what Kant calls "Nature." Not all transcendental arguments are therefore concerned to demonstrate the subjective source of the

³⁴ See Franks, *All or Nothing*, 85, n.1, for a discussion of Schelling's "astute point" concerning the original or foundational role of the categories of relation not only with respect to the table of categories at KRV A80/B106, but also with respect to the form of transcendental philosophy in general. Franks cites Schelling's first essay, "On the Possibility of a Form for All Philosophy," hereafter *Form*, trans. Fritz Marti in F.W.J. Schelling, *The Unconditional in Human Knowledge. Four Early Essays* (Lewisburg PA: Bucknell University Press, 1980), 52 (SW I, 107).

³⁵ Forms 52 (SW I, 107).

faculties, and not all a priori space and time is formed according to the world of experience.

2. As to the *consequences* of the fundamentality of relation, they follow the implications of this causal-transcendental account of concept production. The first of these concerns the role of *dynamics* as the "grounding science" of philosophy that Schelling's first edition Introduction to the *Ideas for a Philosophy of Nature* generates, and its implications for grounding science, or the science of grounds, in general. The second then concerns the implications of a dynamic ground for concept production, for the emergence of philosophical form, and thus for the *range of possible* objects of transcendental philosophy as such.

Both the above accounts emerge from considerations of form that are not themselves *merely* formal precisely because they are concerned with the question of the *formation* of form. It is *transcendental* to the extent that an argument may be accounted transcendental just when it (a) rises above its content to (b) inquire after the conditions of that content. Precisely such an inquiry is undertaken by Schelling's Introduction to the *Ideas*, and it is from this transcendental inquiry that it follows that the science of grounding cannot *not* be a naturephilosophy. The precise manner in which the problem of nature inflects transcendental philosophy concerns the necessity of priority. The manner in which transcendental philosophy inflects the philosophy of nature consists in (a) what follows from the extension of transcendental arguments from tracking cognitions to their apperceptive grounds to problematizing the grounds of apperception; and (b) how ideation, if generated, invests world.

The Introduction forms a continuous argument from which the entire basis, form, and problems of a "grounding science" is to arise.³⁶ It addresses the possibility of separation, the nature of *freedom*, the constitution of *matter*, the causes and the consequences of confusing a transcendental with a dualistic account of the emergence of concepts, under the rubric of the problems which a philosophy of nature has to solve. Following an initial statement on the theme of why it is that philosophy (a) must arise because (b) an answer to the question of what it is cannot be given immediately, the argument begins by asking, "How a world outside us, how a Nature and with it experience, is possible" (*SW* II, 12, *Ideas* 10). Because implicit in this manifestly transcendental question is the *separation* between world and representation [*Vorstellung*],³⁷ and because this separation has not itself been derived, Schelling asks after its conditions. The

³⁶ "My object, rather, is first to allow natural science itself to *arise* philosophically [*philosophischentstehenzulassen*], and my philosophy is itself nothing else than natural science." *Ideas*, 5 (SW II, 6).

³⁷ Harris' and Heath's translation consistently gives "idea" for both *Vorstellung* and *Idee*. That the text of the Introduction is an extended examination of the presuppositions of transcendental philosophy and what is necessary in order to ground that philosophy remains entirely unclear from the translation as a result. I have therefore amended the translation accordingly.

separation between world and representation *must* be made *if* nature, regarded as mechanism, cannot be held responsible for the production of my representations; it *can* be made *if* there can be "no native sons of freedom," which turns out therefore to supply an uncaused separation. But how, if freedom is uncaused, i.e., steps outside the causal sequence of mechanism, can it step back into it in order to effect anything within it? If an uncaused cause cannot in turn cause effects in what cannot affect it, then such a cause can only cause effects within a world that must henceforth be separated from the mechanically causal one.

This is where transcendental philosophy ends up *if it denies the relation between nature and representation* [*Vorstellung*]: "intellect and thing inhabit two worlds, between which there is no bridge,"³⁸ wasting mental power against an imaginary world. Power that is not wasted is therefore directed against a world which has influence upon minds. Accordingly, between mind and world "no rift must be established; contact and reciprocal action must be possible between the two,"³⁹ making the world a community of forces, just as follows from making the Categories of Relation fundamental.

Yet two things obstruct this one world account: the first is that if representations and world are of the same, mechanical kind, so that the latter causes the former, then "they *precede* representations." If things precede representations and so *can't* be represented, we can never know them. Since, however, I do represent, I ask how this is possible. In so doing, I "raise myself *above* the representation" and thereby "survey representing itself and the whole fabric of representations *beneath*" me. Hence arises the concept of myself as *noumenal*, as something that "has being in itself [*Seyn in sichselbst*]," but at a cost: in that "I adopt a position where no external force can reach me," I exempt myself from the world, so that "the two hostile beings *mind* and *matter* separate"⁴⁰—not, of course, in reality, but only as regards *how I represent myself*, i.e., *transcendentally*. Conversely, transcendentalism cannot consist in world invention on dynamic grounds.

The second obstacle concerns the theory that the matter that underlies nature and therefore my representations is *inert*. If so, then it must be caused, and these causes must lie outside it. Alternatively, matter causes, in which case it is false to consider it "inert," since it "has forces."⁴¹ It is obvious however, argues Schelling, that to say 'matter *has* forces' is not to explain anything, since if matter *has* forces, then these are mere accidents of matter and do not inhere necessarily in it, so that we retain the inert concept of matter and have no conception of how the one interacts with the other. Perhaps forces are, as the Newtonians say, "implanted" in matter; but what would this "implanting" that is neither force nor matter be, and how could it take place? For we "know only how

³⁸ J.G. Fichte, *Science of Knowledge*, trans. Peter Heath and John Lachs (Cambridge: Cambridge University Press, 1982), hereafter *Science*. References are first to *Fichtes Werke* (*W*), 11 vols., ed. I.H. Fichte (Berlin: de Gruyter, 1971), at W I, 436, *Science* 17.

³⁹ Ideas, 10-11 (SW II, 13).

⁴⁰ *Ideas*, 13 (SW II, 16).

⁴¹ Ideas, 20 (SW II, 26).

. . . force itself works against force; but how effects can be produced on something which originally is not force, we have no conception at all."⁴²

Schelling's "result" is that the separation to which I "raise myself" is a separation that is itself transcendental rather than actual or *wirklich*. That is, it must be an ideal separation that arises derivatively from a community of substances without which representing would not be possible at all. Yet as an *ideal* separation, its derivation from the nature of which it is a product is actual. In this sense, Schelling's arguments constitute a transcendental derivation of the transcendental itself not as an artefact of a subjectivity, but of nature. Hence the Introduction's triumphant conclusion:

For what we want is not that Nature should coincide with the laws of our mind *by chance* . . . but that *she herself*, necessarily and originally, should not only *express* but even *realize*, the laws of our mind, and that she is, and is called, Nature only insofar as she does so.⁴³

Moreover, it is clear that the identity presupposed in this productivist account of how nature realizes the laws of mind is of the inductive-causal or Empedoclean rather than the mereological or part-whole sort that is often presupposed by and for Romantic philosophies of Nature.⁴⁴

What then are the consequences concerning the form of philosophy if the Categories of Relation are basic? Firstly, we must reconceive form as forms of motion, as inherently spatiotemporal rather than reducibly spatial, i.e., as stemming already from the synthesis of pure intuition. Hence Schelling's provision of the categorial forms consequent upon dynamics being the "grounding science" of a philosophy of nature:

- 1. *Quantitative* motion, which is proportional only to the quantity of matter—*gravity*;
- 2. *Qualitative* motion, which is appropriate to the inner constitution of matter—*chemical* motion;
- 3. *Relative* motion, which is transmitted to bodies by influence from without (by impact) *mechanical* motion.

It is these three possible motions from which natural science engenders and develops its entire system.⁴⁵ Where for Kant and Fichte, organic form issues from the reciprocity of cause and effect, of substance and accident, for Schelling

⁴² *Ideas*, 17 (SW II, 24), translation mine.

⁴³ *Ideas*, 41-2 (SW II, 55-6).

⁴⁴ See "The Natural History of the Unthinged," chapter 4 of my *Philosophies of Nature after Schelling*, 2008, hereafter *Nature*, for a discussion of linear and nonlinear accounts of the *Grundform* problem.

⁴⁵ *Ideas*, 22 (SW II, 28). It is important to note that this table of categories already pre-empts Schelling's derivation of mechanism from the community of forces he calls "organization"— importantly, not *organism*—in F.W.J. Schelling, *On the World Soul*, trans. I.H. Grant, *Collapse* VI (2010): 66-95, at 90-92 (SW II, 348-350).

it provides the system of motions from which natural science—the thinkability of nature—arises. If the form of science is his focus, this is because a science is (a) derivative and (b) therefore derived *from* something. *But it is precisely the ground of all derivation that the research into forms is supposed to supply*.

We are left, then, with a problem, not unlike that of assigning priority to function or to structure in morphology: ⁴⁶ how are we to conceive of a fundamental form, the form of all science and *a fortiori* of the "grounding science," given the insuperability of motion? How is fundamentality to be *exhibited* if it entails, as does a causal understanding of the origins of our *Vorstellungen*, an equally insuperable precedence?

What Must Transcendental Philosophy Become? On Fields, Forms and *Seinssphären*

We noted above the two uses that Kant made of extended reciprocity, that is, the organic and the dynamic. The definition of "the form of an object" as consisting in "being bounded [Begrenzung]" (KUK AK V, 244) provides a certain insight into the problem of form as regards objects: the object's being bounded entails that it be set apart from or set off against its ground. Objects, that is, possess or inhere in what Husserl, in his discussion of Kant in the *Crisis*, calls *Seinssphären*, "spheres of being". Although it is not a Kantian term, it introduces the concept of sphere or "field" into transcendental philosophy. By it, Husserl means to indicate what may otherwise be called the ontic domains of the special sciences. Kant attributes "actual validity" to the "truths and methods" of those sciences precisely to the extent that they enter into the constitutive fabric of transcendental philosophy. The particular sciences of which Kant makes such use, most clearly in the B edition KRV, are chemistry and mathematics, specifically, arithmetic and geometry. Chemistry to the extent that Kant acknowledges that he owes to it the experimental method that stipulates synthesis as the *productive* corollary of analysis,⁴⁷ such that "Where the understanding has not previously combined, it cannot dissolve" (KRV B130). Arithmetical propositions cease to exemplify analytic truths and come instead to embody synthetic judgments (B15f); and geometry as an a priori science rather than, as would be demonstrated in the following century, consequent upon a posteriori assumptions concerning the nature of space (B40-41). As Jules Vuillemin has noted, transformations in the sciences make the determination of the conditions of possible experience "the

⁴⁶ "The contrast between the teleological attitude, with its insistence on the priority of function to structure, and the morphological attitude, with its conviction of the priority of structure to function, is one of the most fundamental in biology." E.S. Russell, *Form and Function: A Contribution to the History of Animal Morphology* (London: John Murray, 1916), 78. See also Timothy Lenoir, *The Strategy of Life* (Dordrecht: Reidel, 1982).

⁴⁷ See the remarks on Stahl in the B edition Preface (Bxiii and n) and the footnote concerning the "experiment of pure reason" at Bxxi.

most elusive concept in transcendental philosophy"⁴⁸ which, in the present context, demonstrates the effects of the composition of the transcendental from *Seinssphären*. Anything *given*, that is, determines the transcendental as the transcendental *of* what is given: the double demand of chemical epistemology, that an object remains unknown even after analysis should synthesis not follow it, makes transcendental philosophy productivist to the extent that synthesis may equally precede as succeed analysis. *The knowable and the produced* become coextensive, but at the cost *of the unknowability of production*.

If Seinssphären are not beings themselves, but rather penumbra of objects' relations, they would be determined transcendentally in accordance with the categories of relation: accidents to the substances that are objects, which latter are the effects of causes belonging amongst these relations, and into which therefore they enter relations of community. To the extent that the categories of relation are considered dynamically, that is, as *resulting in* such community however, objects are their causal relations, making substance and accident inseparable. Two problems can be derived from this. First, if form is the being bounded of an object, and the synthesis of the categories resets those boundaries around the causal histories and *futuritions*⁴⁹ amongst the reciprocities constituting that object, the boundaries that determine an object's form must now lie at the termini of the series, opening form once again to the problem of the "infinite extent of creation" Kant investigates in the Universal Natural History.⁵⁰ Second, are the dynamics by means of which the transcendental object, whatever its extent, is produced, *part of* that object or its *Seinssphäre* or not? If the object is to be an object, and thus be bounded against a ground, then these dynamics cannot be part of it; if, on the other hand, the object includes its relations, then its production must be included, but can never produce an object. If there are objects, that is, then form must either be bounded against its ground once and for all, such that the form in which objects are given already includes spatiotemporal determination; or the forming of form is not settled, so that the form of all forms, the Urform, is itself formless in the sense of producing all forms, and therefore the form of all forms to the extent that it is the form of their production.

I will make one further remark with regard to these problems which, it is worth recalling, have as their source the application of Kant's Second Remark on the Table of Categories to the Categories of Relation. To the extent that these problems remain determined by the substance-accident metaphysical fundament

⁴⁸ Jules Vuillemin, "Kant's 'Dynamics': Comments on Tuschling and Förster," in Eckart Förster, ed., *Kant's Transcendental Deductions:. The Three 'Critiques' and the 'Opus postumum'* (Stanford CA: Stanford University Press, 1989), 247.

⁴⁹ In "The Question Whether the Earth is Aging, Physically Considered" (AK I, 193-213), Kant's solution is not to seek age in the earth's past, but in its capacity for a future. "Age is not a measure of past time, but of a projected future duration" (AK I, 195). He borrows Leibniz's term *futuritionem* from the latter's *Theodicy* § 36-7 in the "New Elucidation of the First Principles of Metaphysical Cognition" (AK I, 400), trans. in *Theoretical*, 23.

⁵⁰ Immanuel Kant, *Universal Natural History and Theory of the Heavens*, trans. Stanley L. Jaki (Edinburgh: Scottish Academic Press, 1981), 148-161, AK I, 306-322.

that grounds the emergent reciprocity at the summit of the Categories of Relation, the introduction of Seinssphären brings with it the prospective transition from substance to field ontologies. At the same time, however, it alerts us to a problem regarding the determination of these spheres of being with regard to their adequacy vis-à-vis the morphogenesis of fields: why would beings and their relations all form spheres? What would account for the geometrical homogeneity? The only form fields qua fields are determined in accordance with is the form from which they are determined. As Vuillemin notes, fields vary in strength according to its producer and its object such that two fields may not be 'isomorphic' with respect to one another.⁵¹ If what is given with respect to the formation of any field is the strength of the forces involved in its production, then what is given is precisely the *producing* of that field, so that, once again, what is given determines the transcendental as the transcendental of what is given. What is given but never available is, in every case, what cannot be apperceptively reproduced because it exceeds this as its source. In this sense what is given is formless production.

Yet what is transcendental in transcendental philosophy is the "rising above" what is given to transform what is given into something *taken* or *made*.⁵² Transcendental philosophy has always been concerned with the production of objects. It is exemplary, therefore, of transcendental philosophy that it can accept both that "the ultimate knowledge from experience is this, that a universe exists; this proposition is the limit of experience itself;" and "that a universe exists is only an *idea* [*Idee*],"⁵³ where the orbit of subject around object and object around subject is *itself* propelled into a "dependence both as it ascends and as it descends" (KUK AK V, 372), into a series without end.

Insofar as it does this, transcendental philosophy takes from what is given, insofar as what is given is its own source, its "being derived." In consequence, transcendental philosophy is the inquiry into the form of all forms, or into the unconditioned ground, just as reason demands. Since as we have seen, no form can be ascribed to all forms if form is determined as *Begrenzung*, as "being bounded," the form of all forms cannot have bounds, and "being bounded" must be a rejection of form. The form universal with respect to all forms is, in consequence, the form that encompasses the derivation of the derived as the ground of the produced, the *morphogenetic field*, in other words, *from which* the object arises, rather than the *Seinssphären* deriving from objects. "Being derived," not "being bounded," is necessary that the origin of form is a *dynamic*

⁵¹ "Kant's introduction of the ether could be interpreted as an inkling of the notion of a field. Fields, however, are useful because they allow us to analyse forces into what produces the field and what it acts on. . . . But this principle, which applies exactly to electrical forces, is not exact for gravity if the field is too strong." Vuillemin, *Kant's Transcendental Deductions*, 246.

⁵² In part I am here drawing on Jean-François Lyotard, *Leçons sur l'analytique du sublime* (Paris: Galilée, 1991), 222, and the profound analysis there of the role that thought makes of a nature rendered "unstructured or formless" by the discord of the faculties.

⁵³ *Ideas*, 18 (SW II, 24).

problem *such that* the form thus originated is dynamic in character. The form of all form, the product of transcendental philosophy as such, is itself *derived* necessarily from what precedes it, from what it cannot produce. And since it must contain "being derived" in itself, the form of all form *is* grounding precisely insofar as it refers to a ground producing transcendental philosophy, a nature that, insofar as it produces, is precisely this producing of forms, amongst which is the form of all forms that is realized only through transcendental philosophy. How else might this happen? This is why we may say, with Schelling, that what is common to all forms is not this or that boundedness (spherical, hyperspherical, planar, etc.), but rather, insofar as it is the immediate ground of all reality, is force."⁵⁴

The transcendental *is* the in itself formless form of all forms that is always posterior to the unconditioned that generates it and is its ground, and that augments being in turn.

⁵⁴ SW IV, 145, translation modified from Michael Vater, "F.W.J. Schelling. *Presentation of My System of Philosophy*," in *Philosophical Forum*, 32 (2001): 371. Vater translates Schelling's *Kraft* at the end of the sentence as "power."