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THE EPISTEMOLOGY OF SCHELLING'S PHILOSOPHY OF NATURE

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1. Introduction

Shortly after Kant's Critical philosophy took center stage in German academic life, several philosophers, among them Schiller, Schelling, Fichte, and Hegel, took issue with what they saw to be an undue separation of humans from nature built into the machinery of the Critical philosophy. Both influenced by the insights of Kant's philosophy and convinced of its error, these philosophers took on the project of upending the Critical philosophy, while staying true to its spirit, in such a way that man would be at home in nature.

Schelling's philosophy of nature (*Naturphilosophie*) is the result of one such project. Unlike Kant, Schelling treats nature as independently productive and, when viewed as a whole, autonomous, in that it freely gives itself its own laws, although not consciously, but unconsciously. While Kant's nature is passive and constituted by our active, constructive forms of subjectivity, Schelling's nature is independently active and free, and its organization is inherent to it. To anyone familiar with German Idealism, these points are well-known. But what is less clear from the outset is that Schelling's idea of human reason is radically altered from what comes before. According to the philosophy of nature, an analog to rationality is manifested by the lawful productivity of nature, and this develops more fully into human forms of rationality. Thus, Schelling makes the lawful structures of nature the *precondition for* reflection and subjectivity, rather than a characteristic or *result of* reflection and subjectivity. The original home of rationality is nature: the lawful and independent productivity of nature gives rise to the human being, who is both conscious and free. Consciousness, and with it, human rationality, emerges from nature. It is the resultant shift in the idea of rationality that gives rise to the distinctive epistemology

of the philosophy of nature, which, as I will argue below, takes as its guiding idea that humans are paradigmatically *natural* beings, and this naturalness is expressed in and essential for the activity of scientific inquiry.

In this paper I will give an overview of the philosophy of nature and its distinctness from Schelling's transcendental idealism, and then discuss the epistemology that is contained within the philosophy of nature. The distinctness of this epistemological framework has been neglected, interpreters often mixing in epistemological categories from transcendental idealism. If one examines this framework in isolation, a picture emerges according to which knowledge is a result of the productive activity of interfering with nature, and is thus continuous with other forms of productive activity in nature. Schelling's philosophy of nature is thus an excellent source for a genetic account of rationality that does justice to the harmony of nature and reason. While Kant and Hegel are concerned with nature's amenability to rational forms of thought, both locate the source of nature's structure in subjectivity, making a genetic account of rationality difficult. Thus, Schelling is the German philosopher to resurrect for this purpose. I will in the final sections of this paper turn to McDowell's account of mind and nature to show how Schelling's framework can be put to use to resolve the problems coming from McDowell's Kantian and Hegelian inheritance.

2. Textual Focus

For the purposes of this paper, I will be focusing on four main works: *Ideas for a Philosophy of Nature* (1797), *On the World Soul* (1798), *First Outline for a System of the Philosophy of Nature* (1799), *On the True Concept of the Philosophy of Nature and the Correct Way to Solve its Problems* (1801). These are the core works of the philosophy of nature in this period. As mentioned above, Schelling's transcendental idealism is a wholly independent system, and yet he sometimes discusses the philosophy of nature in works devoted to transcendental idealism, as well as the relation between the two. Thus, in what follows, I will also sometimes refer to the 1800 *System of Transcendental Idealism*.

3. Philosophy of Nature and Transcendental Idealism

In his philosophy of nature, Schelling breaks both with the Fichtean and Kantian transcendental idealisms, which both privilege the subjective contributions to experience and make them explanatorily basic.[1] In Fichte's terms, Schelling is neither an idealist nor a dogmatist; he privileges neither the subjective nor the objective in experience. Rather, for Schelling, transcendental idealism and the philosophy of nature

jointly comprise the whole of philosophy, and neither is complete without the other:

> To make the *objective* primary, and to derive the subjective from that, is, as has just been shown, the problem of *nature philosophy.* If, then, there is a *transcendental philosophy*, there remains to it only the opposite direction, that of *proceeding from the subjective, as primary and absolute, and having the objective arise from this.* (*System*, 7; SW I/3: 342)

In transcendental philosophy, the "objective," or the basic principles of the world of nature, is derivable from the "subjective," or the principles of self-consciousness. In this Fichte and Schelling are not so different. But the philosophy of nature, in which one can derive the principles of consciousness from nature, or the "subjective" from the "objective," has equal priority. Thus Schelling describes his philosophy of nature:

> But if Nature *can* produce only the regular, and produces it from necessity, it follows that the origin of such regular and purposive products must again be capable of being proved to be necessary in the relation of its forces, in Nature thought as independent and real—it follows *that therefore, conversely, the ideal must arise out of the real and admit of explanation from it*. (*Outline*, 194; SW I/3: 272)

One could read the above passage as claiming merely that because nature acts with necessity, it must be governed by ideal laws that somehow emerge from or are explicable in terms of nature. However, in various other passages, Schelling makes clear that what is being explained is not ideal laws governing nature, but the emergence of self-consciousness. For instance, in the 1800 *System*, Schelling claims that nature's progressive development of forms results in instances of nature attempting to become an object to itself, which is ultimately achieved in the rational nature of humans, "whereby nature first completely returns to herself" (*System*, 6; SW I/3: 340). While Schelling uses the term *derive* in the above quotation, derivation takes a different form from the perspective of the objective: Nature will not derive consciousness in a *logical* or argumentative way, since these powers of consciousness are the things to be derived and cannot be presupposed in such derivation. Rather, if nature has principles, then the best way to consider derivation is real production according to these principles—in other words, this is a *genetic* account of rationality, which is analogous to logical forms of derivation, in that it proceeds according to principles.

And so Schelling claims that we can regard rationality—and thereby subjectivity—as emerging from the natural world. In his *Ideas*, Schelling summarizes quickly the key step in the dialectical process by which this occurs:

> At that time [prior to any philosophical questions] man was still at one with himself and the world about him. . . . [But] his spirit, whose element is *freedom*, strives to make *itself* free, to disentangle itself from the fetters of Nature and her guardianship. (*Ideas*, 10; SW I/2: 12–13)

This account begins with an original unity with nature, which Schelling terms a philosophical state of nature, in which human beings are not distinct from the natural world. It is also important to note that, while freedom is here identified as belonging to human beings, it does not appear out of nowhere and attach itself merely to man. Rather, nature already reveals itself "in gradual approximations of freedom" (*Ideas*, 36; SW I/2: 48) that culminate in humanity. In its most complex stage, Nature, though humanity, is then able to take itself as an object of thought, and thus the human being "makes itself free" from mere nature through the spontaneity of reflection:

> As soon as man sets himself in opposition to the external world . . . the first step to philosophy has been taken. With that separation, reflection first begins; he separates from now on what Nature had always united, separates the object from the intuition, the concept from the image, finally (in that he becomes his own *object*) himself from himself. (*Ideas*, 10; SW I/2: 13)

Thus, reflection is the highest manifestation of freedom in nature, and it is what, at this state in Schelling's work, the term *freedom* is often used to name. It is not, however, the only manifestation of freedom, since freedom is also needed in order to explain life, for instance, in animals; already in the living organism "we meet that absolute unification of Nature and Freedom in the same being" (*Ideas*, 36; SW I/2: 48). Thus Schelling connects the activity of nature as a whole, the activity of animals, and the fully free activity of humanity.[2]

Recall that the philosophy of nature is one side of Schelling's philosophy at this time, the other side being his transcendental idealism, as worked out most thoroughly in his 1800 *System of Transcendental Idealism*.[3] The philosophy of nature describes the process by which nature produces human rationality and subjectivity as the culmination and highest manifestation of its free productivity; transcendental philosophy derives the features of the world from the characteristics of subjectivity. Each system describes knowledge differently from the standpoint and vocabulary of that framework. It is fruitful for one to keep in mind the separateness of these two systems and the resultant ways of thinking about knowledge, especially if one regards the standpoint of the philosophy of nature as a particularly interesting line of thought. Heretofore, secondary literature has not been especially attentive to the separateness, melding together epistemological categories such as intellectual

intuition (categories operative in the transcendental philosophy) with categories such as active productivity (operative in the philosophy of nature).[4] Schelling explicitly condemns such amalgams:

> Many persons, misled by the phrase "philosophy of nature," expect to find transcendental deductions from natural phenomena . . . and will regard natural philosophy generally as a part of transcendental philosophy; whereas it forms a science altogether peculiar, altogether different from, and independent of, every other. (*Outline*, 199–200; SW I/3: 280)

This is a claim he reiterates at length in *On the True Concept*[5] in response to his critics. Schelling also addresses the relationship between philosophy of nature and transcendental idealism, and the nature of their ultimate complementarity, in the *Outline*.[6] He again draws a contrast between the respective epistemological frameworks, particularly with respect to intuition. What amounts to *intellectual* intuition in the transcendental idealism is, in the philosophy of nature, drawn out in an infinite (temporal) series that we can comprehend only finitely, in *external* intuition. In other words, what is comprehended completely in intellectual intuition can only be comprehended in a piecemeal way in the philosophy of nature, through external intuition:

> The *empirically infinite* is only the external intuition of an *absolute* (*intellectual*) *infinity* whose intuition is originally in us, but which could never come to consciousness without external, empirical exhibition. . . . If, that is, the finite can be intuited only externally, then the infinite can not even be presented in external intuition otherwise than through a finitude which is never complete, i.e., which is itself infinite. (Outline, 15; SW I/3: 14)

Schelling, although he regards these two forms of philosophy as complementary, jettisons intellectual intuition and other elements of the transcendental philosophy from the philosophy of nature, favoring instead complete independence and self-sufficiency. Nevertheless, it is recognizing *myself* as an element in nature's productivity in my own creative activity that allows me to have knowledge of nature. And so in the following sections I will present the epistemological picture of the philosophy of nature, which, when considered in isolation, resonates with contemporary philosophy. I will return to this epistemology of the philosophy of nature in § 5, after briefly summarizing the philosophy of nature in § 4, which provides the groundwork for that epistemology.

4. Nature's Unconscious Productivity

According to Schelling's basic explanatory schema in his philosophy of nature, nature is conceived as the antithesis of productivity and product.

The productivity of nature and its limitation jointly produce the various objects in nature, including inanimate objects at one end of the spectrum, and self-conscious rational animals at the other (*Outline*, 213; SW I/3: 299). Inorganic products of nature are products of nature in its free, self-giving laws, and are subject solely to nature's general laws. Organic products of nature, in contrast, are both subject to nature's general laws, as well as the source of their own productive lawfulness, in which they are bound to act and produce according to the necessity of their species nature. Therefore they are, like inorganic products, a result of nature's productivity, but unlike inorganic products, they are themselves productive (through reproduction, growth, and other organic activities), and thus, as individuals, participate actively in nature's production, rather than merely passively.

Nature is thus at its essence not dead, passive matter and mechanism, but rather life and productivity. A product of nature is thus more paradigmatically natural the more it is itself productive:

> The essence of all things (which are not mere appearances, but rather converge through an infinite series of stages of individuality) is life; the accidental is only the manner of their life, and also the dead in nature is not in itself dead—it is only extinct life. (*On the World Soul*; SW I/2: 500)

Nature, as productivity, thus produces all natural objects along a spectrum: as a "series of stages of individuality." Organisms, which are themselves productive, are also produced as a graduated series of productivity, culminating in humanity:

> The productivity of nature is absolute continuity: for this reason we will present that graduated series of organisms . . . not as a graduated series of products, but as a graduated series of productivity. . . . The leap from polyp to mean appears gargantuan to be sure, and the transition from the former to the latter would be inexplicable if intermediate members did not step in between them. (*Outline*, 43n; SW I/3: 54n)

The highest form of productivity in nature is humanity. It is not only different in degree, however, but human productivity differs in kind from mere nature's unconscious productivity and the unconscious productivity of an organism, both of which are lawful and autonomous. The human being can become conscious of the principles of his (and thus nature's) productivity; the human being can consciously oppose the productivity of nature with alternative, self-given laws. Moreover, there can be a mismatch between the human being's conscious formulation of the principles of productivity and the actual laws or principles. In other words, we can be *mistaken*, we can have false beliefs. Nevertheless, the

basis for Schelling's epistemology is the original naturalness of human productivity. We remain natural producers, and can progressively bring the principles of our productivity—which, by extension, is nature's productivity—to consciousness.[7] This is done most systematically in scientific experimentation. Consciousness of the principles of our own natural productivity is what constitutes knowledge of nature. These points require further specification and justification, and so I now turn to Schelling's conception of knowledge in this period.

5. Knowledge as Conscious Productivity

Schelling rejects the idea—which he attributes to Kant—that in order to be free we must escape the influence of nature, locating the source of this error in an improper separation between mind and matter (*Ideas*, 13; SW I/2: 17). He criticizes Kant's notion of freedom, saying that with such a notion, "how things affect *me* (a free being) is not at all conceivable. . . . There can only be deed and act in me; from me events can only *proceed*; there can be no passivity in me" (*Ideas*, 13; SW I/2: 17). While this may not be a fair reading of Kant, this passage highlights the difference between Kant and Schelling insofar as Kant characterizes freedom as escaping determination in and through the sensible world through motives of the understanding; he locates the source of freedom entirely in the spontaneous activity of the understanding, opposing this realm to that of a determined and passive nature. In contrast, for Schelling, nature is infused with productive activity and can itself be seen as the source of freedom: as mentioned above, nature is itself progressive manifestations of productivity and freedom, and the human is the highest manifestation of freedom in nature:

> So long as I myself am *identical* with nature, I understand what a living nature is as well as I understand my own life; I apprehend how this universal life of Nature reveals itself in manifold forms, in progressive developments, in gradual approximations of freedom. (*Ideas*, 36; SW I/2: 48)

Schelling's notion of freedom, then, is not one of independence from nature: At its essence, nature is free, and so there is, at least, no *contradiction* between being fully free and fully natural. While freedom requires activity, it is not pure activity or escape from passivity. What Schelling describes as freedom in the *Ideas* is later (in his introduction to the *Outline* of 1799) described as "productivity." This is helpful, since, in contrast to freedom, it is easy to understand what productivity in nature is meant to indicate, and we can straightforwardly identify human freedom with conscious productivity. In this later vocabulary, nature is unconsciously or blindly productive of its various forms, which them-

selves manifest varying degrees of productivity, which culminate in the human.[8] But the human is not just one part of nature: it is reflective, and as the culmination of nature's productivity, it is consciously productive, that is, it is free in the fullest sense. Unlike unreflective animals, man "sets himself in opposition to the external world," that is, he takes it as an object of reflection. This opposition to and separation from nature (and himself, since he also takes himself as an object of reflection) is, however, not necessarily permanent. Humanity may one day return to its original unity with nature, although not unconsciously, as a mere organism, but consciously and knowingly (*Ideas*, 10; SW I/2: 13). The progress of the scientific knowledge of nature brings humanity closer to this end.

While Kant claims that transcendental freedom, freedom in the fullest sense, requires absolute independence from sensible determination, Schelling's notion of freedom is that of conscious productive activity built upon the unconscious foundation of productive activity, which remains even in consciousness. The language of *production* is apt since production is not (at least, not usually) creation *ex nihilo*, but it requires materials that a craftsperson works with in order to produce something. Moreover, while the materials are manipulated by the craftsperson, they have proclivities that "fight back," so to speak, and the product is determined not merely by the activity of the craftsperson but also by the limiting activity of the materials. We can see the activity of animals as a species of such production, as animals shape their environments, and this requires both an environmental "given" to be shaped along with the activity of the animal, and the end result—a beaver's dam or an antelope caught and killed—is a product of these two elements. Thus production is a fully natural phenomenon, and so freedom, as conscious production, has its origins in nature. As we saw above, reflection is intimately tied to human freedom as conscious production; it may not come as a surprise, then, that knowledge for Schelling is a species of human production. Let's now turn to examine this notion of knowledge.

Knowledge, for Schelling, is a kind of making. We *produce*, or rather, are coproducers of, the objects of knowledge (*Outline*, 197; SW I/3: 276). This is not the Kantian notion that nature is partially constituted by our concepts. Rather, in interacting with the world in a practical manner, we interfere with its activity: we put a question to it, which it is in turn compelled to answer. Schelling in his 1799 introduction to his *First Outline for a System of the Philosophy of Nature* gives a concise formulation of this idea:

> Now, it would certainly be impossible to get a glimpse of the internal construction of Nature if an invasion of Nature were not possible

> through freedom. It is true that Nature acts openly and freely; its acts however are never isolated, but performed under the concurrence of a host of causes which must first be excluded if we are to obtain a pure result. Nature must therefore be compelled to act under certain definite conditions, which either do not exist in it at all, or else exist only as modified by others.——such an invasion we call an experiment. Every experiment is a question put to Nature, to which it is compelled to give a reply. (*Outline*, 196–97; SW I/3: 276)

Thus, data in science (or, by extension, the empirical basis of any kind of theoretical knowledge) emerge from active interaction with the natural world: we must interfere with it, change it, and ask a question. And we must do so with an idea of what the answer will be. Thus "data" are not given or found, rather, they are coproduced by the practitioner of a science and nature, as a result of that practitioner's questioning of and interference in nature. Schelling goes on:

> But every question contains an implicit a priori judgment; every experiment that is an experiment, is a prophecy; experimenting itself is a production of phenomena. (*Outline*, 197; SW I/3: 276)

We approach nature with an a priori idea of what the phenomena will be, and, in experimenting, we manipulate the natural world, producing these phenomena, which may not always be in accord with our original "prophecy." Thus, there is a kind of feedback loop in which nature's response to our questions, nature's active interaction with our productive activity, can then alter our a priori judgments and affect the kinds of experiments we conduct in the future. For Schelling, then, a priori does not designate particular principles or the means by which we come to know them. Strikingly, he claims that a judgment that is originally "merely historical" *becomes* a priori when we become conscious of its necessity (*Outline*, 198; SW I/3: 278). Schelling is not simply equating a priori and necessary in a mere terminological shift. Instead, he is claiming that the principles we come to believe are nature's own governing principles are the ones that determine what sorts of experiments we conduct and the expected outcomes, and so they function as a priori for us.

Schelling likens this type of knowledge that results from this interaction to the knowledge of a craftsman who is "the soul of his work" because "it preexisted in his head before he exhibited it as a reality" (*Outline*, 196; SW I/3: 276). The practitioners of a science, then, are like craftspeople continually producing objects. They do so with an idea of what the object will be, but often it turns out differently. According to Schelling, then, we are continually making and remaking nature, in hopes that it will accord with our ideas of it, and continually modifying those ideas as a result. He contrasts this type of intimate and interactive

knowledge with "mere seeing," in which we are merely acquainted with the existence of an object, and which should not be called knowledge at all (*Outline*, 196; SW I/3: 276). Only in becoming acquainted with the principles of an object's possibility can we claim to know it, and in the case of nature we become acquainted with its productive activity by also engaging in such productive activity.

Schelling is here discussing the kind of knowledge involved in natural science, or what we might anachronistically term the philosophy or epistemology of science, but this coheres with many other statements he makes about knowledge more generally. In the slightly earlier *Ideas*, he claims *freedom* is the ultimate precondition for all human knowledge: "Only by contrast to a free activity in myself does that which freely acts upon me take on the attributes of reality; only upon the original force of my *self* does the force of an outer world break in." In knowing, he claims "activity and passivity are in the fullest interaction" (*Ideas*, 174; SW I/2: 218). Thus freedom is not just *action* but *interaction*, since it requires passivity with respect to the activity of the outer world. If, as I argued above, freedom and conscious productivity are interchangeable, then the account of knowledge in the *Ideas* is the same as that presented above from the *Outline*: we interact with the world around us based on our current conceptions—the "a priori" principles governing our production— and it pushes back and changes those conceptions. This interaction with nature, mediated by principles, is what makes knowledge possible.

And finally, Schelling's statement that "the free man alone *knows* that there *is* a world outside him; to the other it is nothing but a *dream* from which he never awakes" (*Ideas*, 174; SW I/2: 218) is best understood in the context of the comment above on "mere seeing": unless we are working to discover the new a priori, to discover the inner nature and necessity of the world around us, we are not coming to knowledge at all, but rather merely watching the world go by.

And so, the conception of knowledge in the introduction to the *Outline* is not, as some have claimed, an aberration from what came before and what comes after, perhaps a result of Schelling's closeness to Goethe at this time.[9] While perhaps the framing of this epistemology—in terms of experiment—might be a feature of Goethe's influence, the underlying ideas of conscious productivity or freedom being the precondition for knowledge remain the same throughout the philosophy of nature, and can even be read in continuity with Schelling's later philosophy.[10]

One could object, at this point, that Schelling just amounts to a closet Kantian: notwithstanding his insistence that nature is not constituted by our understanding, what this a priori amounts to cannot be anything

but Kantian constitution. That is, we still interpret our world through our understanding of it; he merely replaces the fixed notions of the categories and forms of intuition with a more malleable a priori, our current understanding. And thus there is even less reason to think that Schelling has any right to claim real knowledge of nature over and above Kant, since an ever-changing a priori, since we expect it to change, cannot truly be latching on to what is real in nature. According to this interpretation, Schelling would find himself in the company of neo-Kantians such as Carnap and Reichenbach; he is in essence a Kantian with a "relativized a priori."[11]

This reading may present itself as the obvious interpretation of Schelling if one were simply to look at the passages mentioned above from the *Outline* in isolation. But, since Schelling is so keen to distance himself from the Kantian "constitutive" view of nature, this cannot be correct. Ultimately, Schelling's idea of the a priori does not reduce to a role played in cognition, although the a priori certainly *does* play a role in cognition. The reason we call it a priori does not have to do with our cognitive processes. Rather, since nature (the thing that is known) operates according to necessary a priori principles, when we come to know those principles we also term them *a priori*, and they thereby come to play that role in our interactions with the natural world. He states:

> *It is thus not that* we know *nature* a priori, *but rather that nature* is a priori, that is, everything individual in it is determined in advance through the whole or through an idea of nature generally. But nature is a priori, so it must also be possible to *recognize* it *as* something a priori, and this is indeed the meaning of our claim. (SW I/3: 279)[12]

It is, perhaps, true that Schelling is taking a cue from a Kantian picture of how we might come to know something, that is, by being the source of its principles of constitution. There is, however, a better way to state Schelling's position such that the differences with Kant are more manifest. Nature *produces* or *constitutes itself* though *its own* a priori principles. How, then, can we come to know these principles, since we are not the source of them? We come to know them by occupying the place of nature and engaging in such production ourselves. We can do this because we remain natural, not only in the sense that consciousness emerges from nature, but also in the sense that we remain organisms, natural producers. My own activity as organism remains, for the most part, opaque to me. And yet I, as organism, cannot help but produce according to natural laws. It is because I, as natural, am a source of these laws, unconsciously, that I can become conscious of them.[13]

So we get hints (through experience) of what these principles might be, we adopt them consciously and produce natural phenomena with

them, and in doing so, we become like nature. Or stronger: we simply *are* nature, producing. When our production is successful, we recognize the a priori and necessary status of these principles. A lack of success in this context would not be a failure to produce, but a mischaracterization of the principles of production, such that what we thought we were producing and what we produced were not the same, and thus the principles would require modification.[14] We stand in for nature in her production, so to speak, and thus have an intimate knowledge of the principles of this productive activity.

This picture may be easily confused with the neo-Kantian one, since the scientific procedure remains the same. Nevertheless, it is realist in a way that the neo-Kantians cannot claim to be, since nature has independent principles governing her activity: This genetic account of human subjectivity requires that nature's principles are not imposed by a subject, but rather belong to nature itself in its production of the subject. This picture also does not rely on any kind of correspondence theory of truth, since nature's principles are operative in my productive activity. There are not two sets of principles, one in the world and one in my head. Rather, there is one set of principles, which are nature's a priori principles of production, and are thus *my* a priori principles of production, but my explicit characterization of these principles of production may fail when I use them in my own projects, scientific or otherwise.

Consider an example: I design and make a small remote control airplane. I am guided by my idea of the airplane and my conscious formulation of nature's a priori principles that mediate and guide my production of the object. When finished, the plane will not fly. Something has gone wrong with my framework of principles. I produced the plane according to nature's principles, but I had mischaracterized them and applied them inappropriately in my production of the plane. And so I set about figuring out where my explicit characterization of these principles has gone wrong. *Since I am an organism*, a natural producer, the "correct" principles are *my* principles of production, but they may still be opaque to me. Thus bringing them to an explicit and correct characterization requires this process of discovery.

Thus I do not *lose* my naturalness when I become conscious. The natural principles, nature's unconscious principles, are always at work in my activity, whether I am conscious of them or not, whether I characterize them correctly or not. I cannot break the laws of nature in my production of the plane. I act according to my conscious characterization of my unconscious natural activity. When the activity is successful, I may assume (tentatively) that my conscious formulation is correct.

I mentioned at the beginning of this article that Schelling is the philosopher to go to for inspiration for an account of the philosophy of mind, since resurrections of Kant and Hegel tend to have difficulty maintaining a view of humans as natural beings. I will now, in § 6 below, briefly explain why difficulty is inevitable in such a project, looking in particular at the example of John McDowell's *Mind and World*,[15] which manifests the inevitable failure in the struggle to reconcile a Kantian or Hegelian view with the idea that reason is natural. Schelling's account of knowledge in his philosophy of nature serves as a better starting point, as he makes knowledge a *natural* phenomenon.

6. McDowell, Reason, and Nature

Kant and Hegel are often invoked in solutions to the question of how our forms of rationality "get at" the world. McDowell (1996) offers one such solution, and in doing so, demonstrates the inadequacy of this framework to account for rationality as a part of or originating in nature. According to *Mind and World*, the problem of how we can have knowledge about the world has hitherto been dealt with in one of two ways: either one claims there is some nonconceptual experience at the base of our epistemological activities that serves to justify and orient them, or one claims that there is no such experience and justification depends not on a "bottoming out" at experience but on the coherence of one's beliefs. McDowell, following Sellars, dubs the first mode "the myth of the given" and often refers to the latter as a "frictionless spinning in a void." The problem with the first is that the nonnormative content of a nonconceptual experience cannot serve to justify beliefs in a "space of reasons."[16] The problem with the latter is that it completely gives up on the notion of the world-directedness of thought; this is unacceptable. McDowell's solution is to regard experience as completely and everywhere infused with concepts; there is no such thing as nonconceptual content. Thus, "the world" is not something "outside" of a conceptual scheme; it is always constituted by a conceptual scheme and can serve as justification in the space of reasons: "experiences themselves are already equipped with conceptual content" (1996, 25).

This solution to the question of how reason can get traction in the world of experience is Kantian, in that reason can get a hold on experience because it is itself the source of the structure of that experience. This kind of solution already presupposes a dualism between mind and nature that makes any account of the mind as "natural" impossible, since this dualism is one of *dependence*: nature (as experience) depends on the mind for its form and structure. So how could the mind emerge within nature? Such a question does not appear to be answerable, if this is our starting point.

McDowell, however, claims to overcome the dualism. He says that the "frictionless spinning vs. myth of the given" dilemma only manifests itself if we adopt a strict dualism between nature as the realm of law and human spontaneity and rationality as operating outside of that realm of nature. In rejecting this dualism, we can either try to account for rationality in terms of a "bald naturalism" (1996, 76) or, as McDowell recommends, broaden our notion of the natural world to include spontaneity. In doing so, we avoid a mysterious and supernatural view of freedom or rationality (77–78). We also can maintain a separation between the space of reasons and the realm of law.

Unfortunately, this simply reintroduces the dualism. By allowing spontaneity and rationality into nature, McDowell simply means to allow *human* spontaneity and rationality into nature; animal perception (and, by extension, the rest of nature) is entirely independent of this realm of spontaneity.[17] But the question then arises: why think that spontaneity is natural at all? By locating spontaneity, receptivity, and conceptual capacities within the realm of the natural, McDowell claims to overcome a dualism between mind and world. However, simply stipulating that the mind is located in nature does not overcome the dualism unless we explain *how* the capacities of the mind emerge naturally and are in harmony with nature, such that the question of how the mind has access to the world becomes tractable. In other words, McDowell's solution seems like conceptual gerrymandering, while a more robust account would give an explanation of how mindedness is natural. Instead of overcoming the dualism, he expands the concept of nature to encompass it, and then simply renames the dualism, so that instead of nature vs. spontaneity/rationality, we have the realm of law vs. the space of reasons. And so we have not escaped the mysterious or supernatural view of freedom and rationality, since we have no way of accounting for their emergence from the realm of law.

McDowell sometimes implies that he escapes the dualism by taking nature up into the conceptual schemes provided by the spontaneity of human "second nature," thus denying that nature as a realm of law is entirely disenchanted. Spontaneity, he says, "can nevertheless enter into characterizing states and occurrences of sensibility as such—as the actualizations of out nature that they are" (1996, 76). But here, the main problem that McDowell purports to solve reemerges. If there is no "nature" apart from the one permeated by our conceptual schemes, all justification must be in reference to that world constituted by our own spontaneity. McDowell's claim that "second nature," that is, the development of and initiation into conceptual schemes within communities, emerges from "first nature" (human as organism) falls into the "frictionless spinning" of coherentism unless we can somehow explain *how* the

conceptual schemes emerge from and are sensitive to the nonconceptual. And then we are back to the problem of the myth of the given. McDowell is stuck in the dilemma with which he began.

McDowell is thus emblematic of the difficulty encountered in attempting to reconcile a constructive view of nature with a naturalistic account of reason. In regarding rationality as constructing, in some way, the world of experience, Kantian or constructive Hegelian conceptions of the relationship between reason and nature, bound as they are by epistemological concerns about how we cannot know the structure of nature "in itself," will inevitably regard nature as entirely devoid of its own, independent manifestations of rationality and freedom, however implicit. So any inclusion of reason in the realm of nature will appear arbitrary and philosophically unmotivated. In order to show how rationality and freedom are indeed natural, we need to show how they are inherent in nature such that they emerge in their particular explicit manifestation in humans. Schelling offers a model for such emergence, and thus is worth exploring in the context of such contemporary debates.

7. Conclusion

Schelling's philosophy of nature is a philosophical system that was created to stand alone and to complement another complete system, that of transcendental philosophy. It does no violence to the system to consider it in isolation. What emerges from the philosophy of nature is a picture of the world according to which we are products of nature and participate in nature's productivity. Knowledge, according to this picture, is entirely natural and emerges in continuity with other elements of the natural world, particularly the unconscious activity of animals or other natural objects. Our productivity, as conscious productivity, is the final extension of nature's productivity. It makes us unique without cutting us off from nature, as the consciousness of our productivity has as a touchstone the unconscious activity of ourselves as natural beings. We are trying to bring the principles of this activity—*our* activity—to consciousness through experimentation and theorizing.

On Schelling's conceptions of nature and rationality, the origins of rationality are entirely natural. This is therefore a kind of naturalism, since within this framework, explanations—of humans, of rationality, of the possibility of knowledge—rely entirely on features of nature. Nevertheless, one could contend that this kind of naturalism is unattractive, since the conception of nature it rests on, that of nature as a productive whole, is unmotivated or dogmatic.

This charge of dogmatism fails to regard Schelling's work as a whole. Schelling does not present this system of nature without also showing how

we are justified in our knowledge of it. And so it is preemptive to ignore Schelling's thought on the basis that it is unacceptably dogmatic, without addressing his epistemology.[18] It is on the basis of this epistemology that he can say, "*We originally know nothing at all except through experience, and by means of experience*" (*Outline*, 198; SW I/3: 278). It is through experience, through examining the nature of and conditions for my knowledge, that I originally come to posit the principles governing nature, and through experience, through my productive activity, that I put to use the principles of such activity and know them as the a priori principles of nature.

Thus Schelling's philosophy of nature offers to contemporary readers an account of rationality and nature that is worthy of attention. Schelling regards rationality as continuous with capabilities of nonhuman organisms: As discussed above, the productive activity in nature is the basis for human knowledge, and thus reason is not mysterious or supernatural but is entirely natural. And so this account offers a more promising starting point than the Kantian or Hegelian "naturalisms" that have been taken up. For Schelling, nature is in its essence productive; its highest manifestation of its productivity is in us, and we can then turn back to the world with confidence in our knowledge that in coming to know nature, we are coming to know those very forces that manifest themselves in us through free activity and rationality.[19]

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NOTES

1. See Förster (2012, 228, 247) for the view that Schelling sees the philosophy of nature and transcendental philosophy as two equally basic, complementary aspects of philosophy, and Beiser (2002, 471, 483); Richards (2002) for alternative views. On this issue I concur with Förster.

2. In his 1799 *Outline*, Schelling prefers to talk of conscious and unconscious productivity rather than freedom. I argue below that this is a merely terminological shift, and that the unconscious activity of nature can be identified with the manifestations of freedom that Schelling discusses in the *Ideas*. A full discussion of the freedom of nature as a whole and the freedom of organisms is outside the scope of this paper. For a full account, see Fisher (forthcoming).

3. Transcendental philosophy details the I's construction of itself as an object of knowledge, which can be known through intellectual intuition (see

Beiser, 2002, 473–74; for a convincing account of Schelling's difference from Fichte in this period, see Sturma 2000).

4. See, for instance, Förster (2012, 238–39), which objects to Schelling's philosophy of nature by bringing in considerations about intellectual intuition; see also Nassar (2014, 202–3) for a similar mixing of intellectual intuition with the productivity of nature.

5. See especially SW I/4: 85. He misquotes the above passage, to be even more explicit about the philosophy of nature's self-sufficiency: it is a science "wholly existing for itself." See also SW I/4: 88.

6. Schelling's discussions of intuition in the 1797 edition of this *Ideas* are limited to external intuition and its preconditions; see, for example, Schelling's discussion of the construction of matter in the *Ideas* (174–77; SW I/2: 217–25; cf. *Outline*, 75n; SW I/3: 100n). One exception at *Ideas* 35; SW I/2: 48, in which Schelling describes "pure intuition," is best interpreted in light of what he says in the *Outline* about external, finite intuition as opposed to an intellectual infinity.

7. Here I disagree with Förster (2012), especially 238–39, who regards the relationship between producer and product as one of continual oscillation, rather than progressive unification.

8. "Again, the fact that Nature, wherever it is left to itself . . . produces of its own accord, as it were, regular forms . . . or the fact that in the animal kingdom (that product of the blind forces of Nature) we see actions arise which are equal in regularity to those that take place in consciousness, and even external works of art, perfect in their kind——all of this is explained in our view by saying that it is an unconscious productivity in its origin akin to the conscious" (*Outline*, 194; SW I/3: 272).

9. See Richards (2002, 140–42). Nassar (2010) also argues along these lines. It is worth noting, however, that even if the expression of these ideas is altered considerably in the 1799 introduction to the *Outline*, the main points of the philosophy of nature—that is, the equal priority off the philosophy of nature and transcendental philosophy, the self-producing aspect of the organic (*Ideas*, 30–31; SW I/2: 40), nature as itself a self-producing organism (*On the World Soul*), and, as I have just shown, the epistemological framework—are consistent throughout this period.

10. This epistemology, according to which one discovers through experience features of the world amenable to thought, is a feature of Schelling's philosophy throughout his lifetime and sets him apart from other idealists. See Rush on the positive philosophy: "Schelling's is an odd sort of empiricism, according to which the more one experiences the world the more the world's structure antecedent to thought is discovered to be compatible with thought" (2014, 235). This later philosophy changes in that it gets progressively more pessimistic in terms of how exhaustive of successful such knowledge can be; complete harmony with nature (seemingly possible, perhaps even inevitable in Schelling's philosophy of nature) is not within reach. This is especially apparent in the *Freedom* essay, see 36–42; SW I/7 367–75.

11. See Friedman (2001, 71–82); cf. Reichenbach (1965, 48–60).

12. Translation modified from Peterson's *Outline* translation (198).

13. This is my main disagreement with Förster, who claims that it is "obvious" that in nature, "that which is intuited (that which is doing the producing) and the one doing the intuiting (the philosopher) are not identical" (2012, 239). This identity of the philosopher and nature, which Förster here rejects, is not just apparent in the *Outline*, as described above, but is a feature of the philosophy of nature throughout this period (see, for example, *Ideas*, 36; SW I/2: 48). And thus Förster's characterization of the philosophy of nature as involving a "re-creation" of nature (2012, 232, 247–49) is misguided, since it is better regarded as a result of *participation in* nature's creating, made possible by our original identity, by which we come to know it.

14. "From the fact that reason gives laws to experience it does not follow that it has the right to contradict experience; rather, just because it is its legislator, [reason] must be in the most perfect agreement with it, and where this is not the case, it can be rightly inferred that it is not legislating reason that has constructed, but some empirical [form of] reason" (*On the True Concept*: 100; SW I/4: 96).

15. Pinkard (2012) and Pippin (1989) are other examples.

16. McDowell opposes the space of reasons to the nonnormative realm of law. According to McDowell, the best that nonconceptual content could do with respect to our beliefs is to offer causal (nonjustificatory) explanations; thus, the myth of the given "offers exculpations where we wanted justifications" (1996, 8).

17. See especially 69–70; for example, "What we share with dumb animals is perceptual sensitivity to features of the environment. We can say that there are two species of that, one permeated by spontaneity and another independent of it" (McDowell 1996, 69). McDowell maintains that sensibility in humans is quite different than sensibility in animals: human perceptions, because they are "permeated by spontaneity," can function as justifications in the space of reasons. Animal perceptions cannot.

18. Beiser (2002, 466–67) makes a similar point.

19. My thoughts on this topic have been shaped by input from Karl Ameriks, Markus Gabriel, Fred Rush, Dieter Sturma, faculty and graduate students at the University of Bonn, and the participants at the 2013 North American Schelling Society Meeting. I am also grateful to two anonymous reviewers for their helpful comments on this paper.

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