Chapter 5
The Ethos of Critique in German Idealism

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The ambition of Lorraine Daston's and Peter Galison's *Objectivity* is considerable—not only do they offer a rethinking of our notion of scientific objectivity by historicizing it, but they also suggest a rethinking of our histories of science by doing it differently. They argue that scientific objectivity is a nineteenth-century phenomena, emerging through techniques and mechanisms of image making that aimed at a blind sight of nature in its particulars, unmarked by the prejudices, skills or judgments of the subject. Contrasting this mechanical objectivity to the ideal of truth-to-nature that preceded it and the trained judgment that followed it, they offer a "mesoscopic history" that traces the history of ways of seeing and technologies of scientific images across disciplinary and geographic borders. Although examining concrete practices, they eschew seeking specific hidden causes or philosophical frameworks to explain these changes, preferring to follow surface ramifications as they track the uses of scientific atlases across diverse scientific communities. Most singularly they offer an ethico-epistemic history, which argues objectivity is an epistemic virtue that is fused with a certain kind of scientific self (2008, 677). Daston's and Galison's history of objectivity is thus also a history of subjectivity. They contend that the nineteenth-century turn to mechanical objectivity was the result of the rejection of eighteenth-century emphases upon observational genius and discerning judgment in extracting a true image of nature from the mass of passively received sensation. A new emphasis upon self-restraint was perceived as necessary to discipline the overactive self of a previous generation. Scientific objectivity and its attendant scientific self, then, formed a new epistemic virtue, an ethos wedded to epistemology in the pursuit of scientific knowledge.

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Daston and Galison find the reception of Immanuel Kant's philosophy in the nineteenth century provided its vocabulary of objectivity and subjectivity. Kant argued that the transcendental unity of self-consciousness provides the necessary conditions for objective validity and universal knowledge. In contrast, empirical sensations provide only a subjective validity. Objective knowledge is thus determined by the subject's intellectual contributions, by the a priori forms of the understanding, rather than by perception. Daston and Galison emphasize that in the early nineteenth century Kant was variously appropriated and refracted through a range of traditions. By mid-nineteenth century, if the terminology of subjectivity and objectivity was retained, objectivity was redefined as a relation to an external object and subjectivity as inhering in the subject. The acquisition of objective knowledge was now seen as requiring the suppression of subjectivity and in effect a battle of the will against itself. A new anxiety over subjective intrusions into knowledge of nature resulted in a characterization of earlier periods, of the Enlightenment, of idealism and Romanticism, as excessively subjective, and as valuing a self that was not only speculative but also autocratic.

Given the significance of Kant, and post-Kantian German idealism, to this account of the emergence of scientific objectivity and the scientific self in the nineteenth century, it is worth pausing to examine their notions of objectivity and subjectivity more fully. Although Daston and Galison are primarily concerned with the reception of Kant and post-Kantian philosophy in the nineteenth century, rather than a close reading of Kant, they offer an admirable characterization of Kant's transcendental idealism in a few pages (2007, 205–10). But they also gather Kant into a prevalent philosophical position, as holding that epistemology is incompatible with ethos, and that epistemology belongs to the realm of objective validity and therefore stands opposed to subjectivity in all its forms (2008, 671). Their notion of epistemic virtue, however, can be effectively enlisted for a different characterization of Kant's philosophical project, one placing an ethos of critique at its centre. Indeed, rather than eschewing values in epistemology, his critical project can be regarded as making values fundamental to its proper practice. Kant presented his *Critique of Pure Reason* as responding to the demand of his age, "that reason should take on the most difficult of all tasks, namely, that of self-knowledge, and to institute a court of justice, by which reason may secure its rightful claims, while dismissing all groundless pretensions, not through decree, but in accord with its own eternal and immutable laws" (Axi).[1] Kant's legal language is often interpreted as demanding the imposition of rational rules onto our cognitive acts. But he is better understood as introducing his critique as a tribunal for the investigation of the validity of reason's claims and the warrant by which it acquires its laws. Kant critiqued as inadequate empirical philosophies that attempted to derive all knowledge from the senses. But more centrally his critique put the excesses of rational metaphysics on trial. His

[1]In citing the *Critique of Pure Reason*, standard references are used to A and B, the first edition (1781) and second edition (1787), found in volumes III and IV of the Akademie edition (1902–1983), respectfully.

transcendental idealism argued for the discursivity of human cognition, in which the a priori concepts of the understanding provide the form of experience and sensibility provides its content. A "mature and adult power of judgment," he contended, should accept how we ought to reason after reflection upon what human cognition can rightfully claim (A761/B789). The epistemic virtue Kant's *Critique of Pure Reason* validated and valued was the restriction of human cognition to appearances. His ethos of critique made a virtue of epistemic modesty (Axiv; A739/B767).

Kant's transcendental idealism has been critiqued for its rationalist austerity in its insistence upon the necessary laws of cognition, but his critique of pure reason also introduced a different form of austerity in its insistence upon a reconciliation of reason to the world of appearances. Post-Kantian German idealism is often characterized as abandoning Kant's critical strictures and unleashing reason for speculative flights. The nineteenth-century scientists documented by Daston and Galison worried over subjectivitist philosophies that abandoned the tethering of cognition to experience, and that imposed the ideas of reason onto the natural world and constructed willful, imaginary metaphysical systems. Yet two of Kant's most prominent successors, Johann Gottfried Fichte and Friedrich Wilhelm Joseph Schelling, deemed themselves as carrying further the Kantian critical project. They began with a critique of Kant's critique, a meta-critique, which interrogated the assumptions underlying transcendental idealism and the elements Kant excluded from critical reflection. If at times excessively reflexive and abstract, their meta-critical philosophies attempted to prevent the sedimentation of our conceptions of objectivity and subjectivity. In questioning Kant's settlement with appearances, they did not then claim a hypostatization of self-consciousness or speculative powers of nature, but interrogated the subjective and objective contributions to our cognition even more comprehensively than Kant. Indeed, Fichte and Schelling can be regarded as furthering the values introduced through critical reasoning, by emphasizing a philosophical reflection that lifted thought out of its unconscious habits, and stimulated thinking as well as moral action to be freely self-determining. In this sense, they can be regarded as extending Kantian critique as an epistemic virtue.

5.1 Kant's Critical Project: Critique as an Epistemic Virtue

Daston and Galison contend not only that the "modern sense of 'objectivity'" (as a "relation to an external object") and its opposition to subjectivity (as "personal, inner") are legacies of the nineteenth century, but also that these definitions are a reaction against and an inversion of Kant's definitions of objectivity and subjectivity (2007, 30–31). They emphasize how, in the nineteenth century, the "act of repeatedly distinguishing between objective image and subjective interpretation for image after image created the phenomena it was meant to enforce: the sharp boundary between objective image and subjective interpretation" (2008, 668). Yet Kant's uses of the terms objectivity and subjectivity are not as symmetrically opposed to the nineteenth-century uses as Daston and Galison suggest, and indeed he can

be regarded as complicating the boundary between objectivity and subjectivity. Kant recognized that his notion of objectivity was revolutionary for his time, in relinquishing the common assumption that "our cognition must conform to objects" and instead "assuming the objects must conform to our cognition" (Bxvi). His model, however, was the new experimental natural science, as exemplified by Galileo, which "comprehended that reason only has insight into what it itself produces after a design of its own; that it must take the lead with principles for its judgments according to constant laws and compel nature to answer its questions" (Bxiii). Kant concluded that the laws of experience are the a priori forms of thought, with the objective validity of these laws ultimately founded in the transcendental unity of self-consciousness. But these a priori laws are only half the story of Kant's transcendental idealism. Empirical sensations only have subjective validity, nevertheless "the condition of the objective use of our concepts of the understanding is merely the manner of our sensible intuition, through which objects are given to us" (A286/B342). Critical reflection upon the validity of our cognitive claims led Kant to accept its boundedness to objectivity in both formal and empirical senses, and to make a virtue of being reconciled to these limits. Much of Kant's transcendental idealism concerns the synthetic relation of the two stems of human cognition, sensibility and understanding, and the mediating work of the imagination as well as laws in effecting these relations. Moreover, he contended that judgments of particular empirical laws require the projection of an order of nature that can only be a subjective regulative idea. Kant's critical project involved not only self-reflection, but also self-cultivation as epistemic virtues. Rather than sharpening the boundary between objectivity and subjectivity, then, Kant provided an analysis of the several ways and different layers in which subjective and objective contributions are made to our cognitive experience.[2]

Although human reason has a natural tendency to exceed the bounds of experience, Kant's critical philosophy set out to reign in such metaphysical flights, through reflection upon both the a priori forms and empirical matter of objective knowledge. Kant introduced his *Critique of Pure Reason* in 1781 as a court of justice to adjudicate the sources and boundaries of reason, and thus its rightful claims to cognition. He acknowledged that the utility of such a critique was largely negative, serving to purify reason from its metaphysical excesses (A11/B25).

[2]Kant's terms *Objekt* and *objektive*, and *Subjekt* and *subjektive*, are readily translated into English. Kant also used the term *Gegenstand*, commonly translated as object. Some scholars have argued for a systematic difference in Kant's uses of the terms *Objekt* and *Gegenstand*. Henry E. Allison, for example, organized his analysis of the two parts of Transcendental Deduction in the *Critique of Pure Reason* around the distinction between the objective validity of the categories with respect to objects [*Objekte*] in a logical sense, and the objective reality of categories with respect to objects [*Gegenstände*] understood in their applicability to human experience. Although some scholars have taken up Allison's distinction, it has also been widely criticized on philological grounds, and Allison himself has subsequently admitted that the distinction in Kant's use of the terms is misleading (Allison 2004, 476 n. 11). The Guyer and Wood translation renders both German terms as object.

Rei Terada, however, emphasizes the positive work of Kant's critique, its project of reconciliation to the world. She suggests that Kant's language of rights and boundaries "makes room for the odd notion of a right to appearance (2009, 84–85)" That we have a right to no more than appearance may come as a relief—in being able to have no more, in being supposed to do no more, we are free to do no more. Kant's critique suggested that to conclude that the limits to reason are inevitable already constitutes an endorsement of them; things that cannot be otherwise require our endorsement. This endorsement completes our obligation. We are obligated to accept the world of appearances, to accept the character of human cognition and the bounds of experience. We are also obligated to do no more; the right to claim no more is also the right to be free from guilt that there are questions that reason cannot answer. To accept Kant's settlement is to accept that it would not be desirable to possess any knowledge other than the knowledge we do possess.

Terada contends that to be satisfied with these necessary limits and thus to be reconciled to our world constitutes a minimal value, drawing attention to the austerity of the Kantian settlement. She argues that Kant, however, added to this minimal satisfaction in his 1790 *Critique of the Power of Judgment*, by introducing further powers of judgment. She highlights Kant's notion of objective liking (the feeling generated through judgment of the relative perfection of an object) as well as aesthetic judgments of taste (the feeling of pleasure in the apprehension of an object and the judgment it is beautiful), both of which enhance our satisfaction with our given world (2009, 73–87). But Terada sustains the common philosophical distinction of fact and value, in giving minimum value to Kant's acceptance of the restriction of human cognition to appearances, and in regarding value as subjective additions to fact perception through feelings of satisfaction. Daston and Galison, however, make a compelling case for our perceptions of fact being intimately entangled with full-bodied values. They do not restrict values to subjective liking, but give them both moral and epistemic significance. Kant's critique can be regarded as an ethos in their sense, as introducing a moral demand to accept how we ought to reason based upon a critical awareness of the limits of human cognition. His critical modesty, his reconciliation to appearances, then, is an epistemic virtue that is fully valued.

Kant granted that only a mature and adult power of judgment would practice such epistemic virtue. Yet he also declared his age was a "genuine age of criticism, to which everything must submit" (Axi). These arguments of the first *Critique* were developed by Kant in his 1784 essay "What is Enlightenment?" In this essay critique is given a larger public role, not only in producing individuals as rational beings but also in contributing to the formation of a rational society. Michel Foucault sees the significance of Kant's questioning in its reflection upon the present and upon the status of his own critical project. He sees Kant's critique as an ethos with a larger social significance, in which the critique of what we are is at the same time an analysis of the historical limitations imposed upon us and an experiment with the possibility of going beyond them (49–50). The critical project thus began with a critique of the present age, with Kant engaging in late eighteenth-century public debates over religion, education, politics, history and anthropology. But what

makes Kant's project relevant to Daston's and Galison's history of objectivity is that for Kant critique was first and foremost a reflection upon the epistemic claims and pretensions of his time. Critical self-knowledge, as a reflection upon the rightful claims of human cognition and an analysis of its distinct elements, also involved a critique of contemporary philosophical positions. Indeed, Kant's posture of epistemic modesty can only be fully appreciated in relationship to the philosophical traditions against which he positioned it.

Transcendental reflection provided Kant with the perspective "through which [he could] make the comparison of representations in general with the cognitive power in which they belong, and through which [he could] distinguish whether they are to be compared to one another as belonging to the pure understanding or to sensible intuition" (A261/B317). Transcendental reflection also provided him with the perspective from which he could critique the amphiboly of the concepts and cognitive powers discriminated in reflection, confusions common among prominent philosophers. He was critical of John Locke, for example, who, lacking such a transcendental perspective and thus deceived by the amphiboly of the concepts of reflection, "sensitivized the concepts of understanding" (A271/B327). Daston and Galison effectively position Kant's transcendental idealism against Enlightenment empiricist philosophies, of Locke and his successors, which derived all knowledge from sensations, even knowledge of the self. Kant dismissed sensations as the basis for knowledge, arguing that they were subjective artifacts of the construction of sense organs that varied between individuals. He contended that only the a priori forms of cognition could provide coherent experience and universal concepts of objects (2007, 208). Importantly, however, Kant was also critical of Gottfried Wilhelm Leibniz's rationalist philosophy, which, similarly deceived by the amphiboly of the concepts of reflection, "intellectualized the appearances" (A271/B327). Leibniz believed he could know the inner nature of things only through the abstract concepts of the understanding. Kant insisted, *contra* Leibniz, it is impossible for us to know things through pure concepts without sensibility, and since we only know things through the forms of human sensory intuition, we cannot know things as they are in themselves but only as they appear to us. Kant's transcendental idealism was a response to British empiricism and its skeptical consequences, as Daston and Galison rightly emphasize; but it was also a response to the rational philosophical tradition in Germany with its pretentions to knowledge beyond the conditions of our sensibility, which Daston and Galison do not acknowledge.[3] Arguably, the larger preoccupation of the *Critique of Pure Reason* is its critique of rational metaphysics and its epistemic immodesty.

Kant's Amphiboly of the Concepts of Reflection appears at the end of his Transcendental Analytic, as he is about to leave the secure domain of cognition, the terra firma of phenomena, for the stormy seas of transcendental illusion. The

[3]Daston and Galison acknowledge that Kant's opposition to empiricist philosophy as merely subjective did not lead him to claim reason reveals the essence of things in themselves (2007, 208). But they do not recognize the significance of Kant's critique of rational metaphysics.

Transcendental Dialectic forms the substantive part of Kant's *Critique of Pure Reason*, the critical examination of the illusions to which pure reason is subject when it severs its ties to sensory intuition—the adventures of reason without end, its deceptions and empty hopes. It was primarily to counter these excesses of traditional metaphysics that Kant introduced his critical tribunal. But before embarking upon this larger task, Kant cast a glance back at the map of the island of cognition, and asked whether we could not be satisfied with what it contains (A235-36/B294-95). Terada reminds us of the two aspects to this question. In laying bare that there is nowhere else to go, no other land upon which we can settle, Kant's critique places us under an obligation to be satisfied with where we are; our obligation is tied to exigencies. Despite the temptations of speculation lying before it, critical reflection reminds us of the virtues of epistemic modesty by exposing the empty pretensions of purely formal reason unmoored from the matter of phenomena. But it is difficult to be satisfied with this domain unless we comprehend by what title we possess it; Kant's critique also emphasized that our rights to the domain is tied to the right to appearances and to no more than appearances (2009, 87–88).

Kant's critical examination of the title by which we possess the domain of experience was not, however, restricted to a reflection upon the boundaries of that domain. He also sought to justify that title by validating the cognitions we can rightfully affirm. As Foucault notes, Kant's critical project involved not only reflection upon the pretensions and confusions of his contemporaries, but also upon his own epistemic claims (49–50). Reflection upon the modalities of cognition, as a mode of thinking about thinking, analyzes the sources of cognition in both understanding and intuition. It is also a method or medium by which philosophy grounds itself, through an analysis of the conditions that warrant cognition (Gasché 1986, 13–22). One of the central claims of the *Critique of Pure Reason* is that a priori concepts of the understanding are the necessary conditions of human cognition and experience, and that the objective validity of these concepts is determined by the transcendental unity of self-consciousness. But these formal conditions of cognition only acquire their objective use through their necessary connection to sensory intuition. In the Transcendental Deduction, Kant sought to legitimate the relation of the a priori concepts of understanding, the categories, to the objects of cognition by demonstrating that they are the epistemic conditions necessary for any thought of an object in general: "The objective validity of the categories, as a priori concepts, rests upon the fact that through them alone experience (as far as the form of thought is concerned) is possible" (A93/B126). He argued that the ground for this objective validity is established through connection with the transcendental unity of apperception, which generates the "*I think* [that] must *be able* to accompany all my representations" (B131-32). Since the unity of representations of an object in a category requires a unity of consciousness, and consciousness of that unity, the unity of apperception provides the ground for the relation of representations to objects and hence for the objective validity of the categories. The transcendental deduction of the categories is only complete, however, when the relation of the categories is established not only to the cognition of an object in general through the unity of self-consciousness, but also to what is given under the forms of human sensibility. The

"condition of the objective use of all our concepts of the understanding is merely the mode of our sensible intuition" (A286/B342); a priori laws must be determined through sensory intuitions, otherwise they would be merely empty logical forms. Kant's claim was thus not that the categories are true and necessarily conform to objects, but rather that they are capable of truth or falsity in specific judgments (Allison 2004, 173–78, 87–88). The objective unity of apperception grounding the pure concepts of understanding must be able to be related to the subjective unity of the synthesis of apprehension in empirical consciousness in judgments. Kant contended that the origin of the a priori concepts of understanding, the categories, is established through their coincidence with the logical functions of thinking. In the Clue to the Discovery of all Pure Concepts of the Understanding, he argued that the categories are acquired through reflection upon the functions and forms of judgment—activities of comparison, reflection, and abstraction. But the a priori concepts of experience, the pure concepts required for our cognition of objects, are derived from those forms of judgment that are needed for thinking about the unity of our sensory intuitions (Longuenesse 1998, 72–80). If the objective validity of our cognitive experience is warranted by the unity of self-consciousness, objective validity is also bounded by the objects of our senses (A286/B342-43); both are necessary conditions of the title to objective knowledge.

With Kant's emphasis upon the formal conditions of our cognition, it is easy to lose sight of his insistence upon the import of its material conditions, embedded as they are deep within the apparatus of thinking. Indeed, Daston and Galison offer a fair assessment of Kant, in arguing his idealism prioritizes the subject's intellectual contributions to cognition. An effect of the specular nature of philosophical reflection is that it has difficulty in inscribing what is outside it other than through appropriating a negative image of it (Derrida 1981, 33). Nevertheless Kant distinguished his transcendental idealism from general logic, in emphasizing it is the form of thought about empirical objects. He insisted that the pure concepts of the understanding must be reconciled with appearances for a rightful claim to cognition. Kant's transcendental philosophy might thus be better described as a doubling, rather than an inversion, of scientific notions of objectivity, insisting upon the objective validity of a priori concepts as well as the objective apply of concepts to sensory intuitions.

Moreover, Kant's discrimination of two distinct stems of human cognition—sensibility and understanding—did not produce a clear boundary between the subjective and objective contributions to experience. Quite the contrary, his analysis of the disparate sources of cognition lead him to reflect upon the series of synthetic acts and mediating apparatus needed to bring them into relationship. On the one hand, the material of sensation must be presented in way suitable for ordering by the understanding. Objects given to us by mean of sensibility are ordered through the pure forms of intuition, the a priori forms of space and time. The given manifold of sensation is then taken up into empirical consciousness through a series of synthetic acts—first the apprehension of a manifold, then the reproduction and combination of these appearances, and finally a consciousness of their belonging to a unified

act of synthesis. The imagination plays a central role here, reproducing, associating and synthesizing the manifold of apprehension into a unified representation. Kant characterized such empirical representations as subjective associations, but they form appearances that can be recognized in a concept to engender objective cognition. On the other hand, the a priori concepts through which we order our experience must be prepared for relationship to appearances. The pure concepts of the understanding, the categories, are acquired from reflection upon the activities of discursive thinking, and their objectivity is established through their grounding in the unity of self-consciousness. Principles facilitate their application to intuition by providing rules for the cognition of an objective temporal order, as the formal condition of inner intuition. The imagination, acting now in a productive capacity, generates schemata to provide determinations of appearances within inner intuition. Kant argued that the elements of judgment thus meet in inner intuition and its a priori form, time, as the one whole in which all our representations are contained. Judgment for Kant, then, is a complex series of acts of synthesis involving heterogeneous sensory and intellectual contributions to cognition; to mediate between them in specific judgments Kant introduced the instruments of imagination and productivity, schemata and principles. If concepts provide a rule by which we can order our intuitions in general, the act of relating concepts to intuitions in particular empirical judgments nevertheless remains without a rule. Despite Kant's elaborate mediating apparatus, he concedes judgment remains largely a matter of wit, a talent for enacting complex syntheses in singular instances without determinate warrant. For all his attempts to provide objective grounds for cognition, its objective validity warranted by the unity of self-consciousness and bounded by the objects of our senses, he admitted actual acts of cognition involved various subjective processes of synthesis.

To have a critical perspective upon the island of cognition, and upon the title to specific empirical judgments, also suggests a view of the whole of its domain. In the Appendix to the Transcendental Dialectic Kant allowed reason to extend beyond the firm terrain of experience to postulate a system of nature as a whole. He was not proposing we could know the objective order of our world, grounded in a first or final cause of the world, as in speculative metaphysics. Rather he was proposing that we could project the unity of nature as a regulative idea and subjective guide for our reflection upon nature in the diversity of its empirical laws. Kant extended his reflections upon the projected system of nature in the Introductions to his *Critique of the Power of Judgment*, introducing a principle of purposiveness to guide our reflection upon the unity of the diverse laws of nature (XX: 208–21; V: 181–88). This principle of purposiveness might seem to suggest that we can regard nature as if it is designed with our cognitive needs in mind. It might lead us to regard nature as if it favors human beings in the distribution of intelligible and beautiful forms, and to support the realization of the moral purpose of humankind. Indeed, many have read Kant as suggesting a supersensible ground underlying nature as the basis for this apparent purposiveness of nature for our intellect (see Guyer 2003). But Kant insisted that the principle of purposiveness is purely a subjective principle and thus

plays a strictly epistemic function in our reflective judgments; it is not nature but our judgments that are purposive. The principle of purposiveness reflects the form of the subject's judgment, in which the unity of empirical laws becomes the purpose of the activity of judging (Steigerwald 2013). Empirical laws extend beyond the a priori concepts necessary for the possibility of cognition in general and that structure determinate judgments of objects. Reflective judgments must discern the unity in diversity and synthesize empirical particulars into a law. Such purposive judging is future orientated, enabling us to anticipate what we do not yet know, and to project a systematically unified whole onto the diverse, contingent and empirically given (Zuckert 2007, 1–86; Longuenesse 2005, 211–35). But if such projective judging is necessary to form the idea of a unity and uniformity of nature as the background for objective cognition, Kant recognized that it aims at an indeterminate end, that its validity is strictly subjective, and thus that its claims are limited.

The cultivation of human reason is the larger project of Kant's critical philosophy. In fostering participation in critique within individuals and more generally within culture, Kant saw the prospect of progressive enlightenment and of reason organically generating or cultivating itself. The *Critique of Pure Reason*, in presenting philosophy as the idea of a possible science or system of knowledge [*Wissenschaft*], pointed to the failed methods of the past and made a claim for critical philosophy as offering a way forward. Kant thus held out the prospect that we can learn to philosophize and to exercise our talent for reasoning in accordance with valid principles, but he also insisted that it is reason itself that must recognize its principles. Reason cannot establish a science unless it has an idea to base it upon which, but reason can recognize it idea only when it has become actual (Shell 1996, 178–81). Kant's critical philosophy, in instituting reason's self-examination, sought to foster its development by establishing its rightful claims, both those with objective and those with subjective validity, and both the productive activity of our cognitive powers and their boundaries. In "What is Enlightenment" Kant also stressed the importance of reason governing itself. To be enlightened is to be autonomous, to think for oneself and to engage judiciously with the percepts of established authority, and in acting and thinking for oneself to take responsibility for one's own affairs. Now, however, Kant enlisted the learned public as a critical tribunal, arguing that the scholar should have both the freedom and the responsibility to examine critically authority not only in philosophical traditions, but also in its civic, political and religious forms (VIII: 35–42). Foucault finds in this essay a powerful combination of a reflection upon our cognition, a reflection upon our historical development, and a reflection upon our present that he identifies as the attitude of modernity. To be elements and agents of a process of enlightenment requires taking responsibility for this process. For Foucault, Kant's significance lay in his recognition that precisely at the present moment critique is necessary to define the conditions under which the use of reason is legitimate, and thus to determine what is obligatory and what is arbitrary. He thus characterizes Kant's philosophical ethos as a limit-attitude—critique as reflecting upon limits (1984, 45–46).

5.2 Meta-critical Projects: After Kant

In making critical reflection upon the bounds of human reason a virtue, Kant's transcendental philosophy can be regarded as having adopted a position of relative epistemic modesty. But Kant's works were not accepted uncritically by the next generation of German philosophers. Realists claimed to find a thing in itself lurking within Kant's account of sensibility. Empirical skeptics rejected the fundamental argument of the first *Critique* that purely formal concepts could apply to what was given in experience. A focus of these critiques was Kant's purported demonstration of the objective validity of a priori concepts by grounding them in the transcendental unity of apperception. Kant himself had struggled to clarify his conception of self-consciousness, in the end simply maintaining that we possess an immediate awareness of this pure "I think" without further justification. In a particularly biting 1793 review, Gottlob Ernst Schulze argued that Kant's restrictions upon cognition should also apply to its transcendental conditions, and that Kant was guilty of hypostatizing a subject as a thing in itself as the basis of cognition in violation of his own critical strictures (Beiser 2002, 240–71; Frank 1987, 96–111). Fichte's and Schelling's readings of Kant were shaped by this critical reception, and their own philosophical systems were developed to resolve the problems that both critics and supporters foregrounded with Kant's transcendental idealism. Neither accepted the terms of the Kantian settlement, the title to the domain of appearances he claimed through determining the validity of our subjective and objective contributions to cognition. Fichte sought a more rigorous understanding of our subjective contributions to cognition, through reflection upon the conditions of self-consciousness and striving for free self-determination in thinking as well as acting. Schelling supplemented Fichte's critical idealism with a philosophy of nature, which sought to extend Kant's critical analysis of contemporary concepts of nature by investigating the boundary conditions of natural phenomena in the endless becoming of nature. In questioning the validity of Kant's claim of a right to appearance, Fichte and Schelling also questioned the concomitant obligation to be satisfied with appearances. Indeed, both, in different ways, opened philosophy to the insatiable prospect of an endless task. Fichte and Schelling retained the Kantian sense of critique as an epistemic virtue, but brought into critical reflection the concepts of subjectivity and objectivity used by and against Kant. Their philosophical projects can be characterized as meta-critical, in that they critically examined not only subjective and objective contributions to cognitive acts but also transcendental reflections upon those contributions. In contrast to Kant, the limits to their philosophical projects were not the boundaries of experience, but the boundaries of philosophy, and the unsettling obligation to accepts its necessary incompletion.

Fichte developed his *Wissenschaftslehre* in a series of texts between 1794 and 1799 as an extension of the Kantian investigation of the transcendental conditions of experience, by subjecting the facts of consciousness Kant took as his starting point to further analysis. He would claim, rather immodestly, to provide a better

defense of Kantian philosophy than Kant himself and in ways more consistent with the principles of critical philosophy. Fichte objected to Kant taking for granted the division of cognition into passive sensibility and active understanding, and thus posing the problem of their relation. He especially objected to Kant resting the validity of a priori concepts of the understanding upon pure self-awareness, without providing the conditions for the "I think" accompanying all cognitive consciousness or inquiring into how the "I" could be immediately conscious of itself and of itself as thinking. He also objected to Kant resting practical reason upon freedom as a fact of consciousness, and for providing no common foundation for theoretical and practical reason. Instead, in keeping with the spirit of critical idealism, Fichte sought to inquire into the transcendental genesis of subject, not by proposing the subject as a metaphysical entity, but by examining in philosophical reflection the activity of the I that underlies all acts of thinking or doing, including those that Kant left as assumptions. Contrary to the claims of his nineteenth-century critics, Fichte did not abandon Kant's tethering of cognition to the world, and continued to insist upon the finitude of human subjects thinking and acting in the world. He did, however, introduce new values into critical reflection, by insisting that free self-determination should form the basis of cognitive and not only moral reasoning. Indeed, he placed freedom at the centre of his philosophy, arguing that all activity of the I should be grounded in freedom. He insisted even one's philosophical position is a free choice, and thus also an ethical position. Critical reflection both upon the activity of the I and upon the philosophical analysis of that activity is key to making this ethical choice. In naming his philosophical system a *Wissenschaftslehre*, Fichte made explicit the critical ethos informing it. If philosophy is a science [*Wissenschaft*] of knowledge [*Wissen*], a search for a knowledge of knowledge, the *Wissenschaftslehre* is a theory [*Lehre*] of that science, a reflection upon the philosophical reflection upon knowledge (Zöller 1998, 16–17). Fichte's philosophical system can be regarded as fitting Foucault's characterization of critical philosophy, perhaps even more so than Kant, in not only interrogating epistemic claims, but also interrogating itself.

The founding principle of Fichte's philosophical system is the self-positing activity of the self or what he termed "the I [*das Ich*]." He was not proposing a substantive being, a soul or spirit, as the basis of human subjectivity. Rather he sought to investigate the subjective warrant for our cognitions, the activity of the I behind unified self-consciousness. He contended that the I posits itself [*Das Ich setzt sich selbst*]; this pure self-positing is the ground of all activity of the human mind, and constitutes what the "I is [*Ich ist*]" or what "I am [*Ich bin*]." Fichte emphasized that the I is not a fact [*Tatsache*], like some thing, but an act [*Thathandlung*]. The self-positing act [*Thathandlung*] of the I constitutes the identity between its action [*Handlung*] and the deed [*That*] that is its product. The subject and the object of this act, its form and content, are identical, making the I a subject-object. Fichte adopted this unusual terminology in an attempt to capture his unique perspective of the I as a pure act. If the terms and technical details of his argument are difficult to follow, his conclusion is clear; the "I is that which it posits itself to be," and the I posits itself as its own pure activity (1971, I/1982, 91–98). The pure self-positing activity of the I underlies all cognitive and practical activity of the finite human subject.

Although every act of consciousness involves the self-positing activity of the I, this activity remains pre-reflective, indeterminate and without predication. To become reflectively self-conscious requires that the pure indeterminate activity of the I become determined, for the "I am" to become "I am this or that." It is as conscious beings in the world interacting with objects and other subjects that we lose the immediacy of pure self-positing and become aware of our finitude. It is only as a finite subject engaged with the world of appearances that the I can appear to itself. The feeling of the limitation of its own activity prompts the subject to posit an external world and itself as a finite embodied being in the world. Feeling its pure spontaneity limited, the I posits something opposed to itself, something that is not itself, or what Fichte terms the "not-I [*nicht-Ich*]." The I posits [*setzt*] itself as counter-posited or op-posited [*entgegensetzt*] by the not-I. The not-I acts as a check [*Anstoβ*] upon the I's pure indeterminate activity and prompts the I to reflect upon its activity and to become self-consciousness of its acts. This check upon the I's activity prompts the I reflexively to determine itself as well as to determine an object external to itself. Fichte's formulation, of a not-I is counter-posited to the I, has sometimes been read as suggesting the external world is but a projection of the mind. Fichte did deny any meaning to a thing in itself, contending that the world can only have meaning in relation to the I's cognitive and practical activity. And even more than Kant, his examination in philosophical reflection of the subjective activity in cognition inscribes what is outside of it as a negative image of itself, as a not-I. But Fichte insisted his *Wissenschaftslehre* was a critical idealism, not a dogmatic idealism; the check of a not-I external to the I is necessary to the determinate knowledge of the I, even if that not-I can only be determined or known through the I (1971, I/1982, 210–11, 227–31, 250–53). Rather than rejecting the strictures of Kant's critical philosophy, Fichte used Kant's method of reflection, applying it to the activity of the I and its limitation through the not-I, and thus analyzing the subjective and objective contributions to our cognition.

Fichte represented his philosophical method as proceeding as an experiment, in which the philosopher observes and investigates the activity of the I. Through reflexive distance the "philosophical eye" observes the "I," retracing ideally the real activity of the I. As he demanded of his students: "Think yourself ... and observe how this occurs" (Fichte 1971, II/1988a, 439–50; see Zöller 1998, 26–39). But Fichte did not stop at the transcendental reflection that Kant used to inquire after the conditions of cognition and to analyze cognition into separate powers of intuition and understanding. He also used philosophical reflection to inquire after the conditions of the "I think" that Kant claimed founded the pure concepts of the understanding. By making self-consciousness itself an object of consciousness, Fichte contended that the philosopher is able to apprehend how the I becomes aware of itself in its encounter with the not-I and to reconstruct the I's reflexive self-construction. He claimed philosophical reflection could also unify Kant's separation of cognition into two distinct faculties, sensory intuition and understanding, by tracing the pre-reflective activities of sensation and imagination that Kant hurried over in his works. He brought into philosophical reflection the feeling of an encounter of the I with something alien to it, and the positing an intuited external

object as its condition. He also brought into philosophical reflection the activity of the imagination in relating the matter and form of experience, its wavering between intuition and its possible conceptualization, until it is fixed in a concept of the understanding through judgment. Fichte purported even the I's original pre-reflective self-positing could be made evident in philosophical reflection (1971, I/1982, 217–35, 291–97). In tracing the construction of self-awareness and bringing unconscious syntheses into conscious reflection, the philosopher strives for an immediate intuition of all the self's activity, or what Fichte termed an intellectual intuition (1971, I/1982, 463–65).[4]

Through philosophical reflection the I strives for self-identity—for the unity of the real and ideal activities of the I, and of intuition and understanding. Yet the role Fichte gave to reflection seems instead to introduce a duplicity into the self. The experiment of philosophical reflection appears to divide the self from itself—to make it at once subject and object of itself. Fichte claimed that this apparent contradiction is appeased by attending to the work of philosophical reflection in effecting free self-determination. Reflection is tasked with lifting the activity of the I out of the sphere of giveness and blind habits of thought, out of both unthinking empirical consciousness and rigid philosophical thought, and making the I conscious of its own activity. Philosophical reflection thus should not only retrace the activity of the I, but also ensure that the I acts freely. Indeed, he demanded of his students not only that they "Think yourself … and observe how this occurs," but also that they think for themselves and thus think freely. This emphasis upon free activity of the I has led many to read Fichte as privileging practical reason over theoretical reason.[5] Yet he argued that both cognitive and practical activities require free self-determination. In his *Wissenschaftslehre* thinking and willing are each implicated in the other. Thinking depends upon willing, in that we ought to think freely, even freely choosing how to philosophize, and we ought to determine ourselves in both our cognitive and practical activities. Similarly, willing depends upon thinking, in that our willing must be thought to have meaning for the I, and needs the concept of the end willed to give form to willing (1988b, 260). This entanglement of thinking and willing shows that the ethos of freedom at the center of Fichte's critical idealism is not only the basis of moral practice but also an epistemic virtue. But it also shows that all free acts of the I are limited by particular determinations of will. His idealism had bold ambitions for the ends of free self-determination—the self-identity of the I as real and ideal, object and subject; an intellectual intuition of the I's original activity; and a coincidence of what the self ought to be with what the self wills itself to be. But he also insisted that such ends

[4]Fichte's conception of intellectual intuition thus contrasts with Kant's idea of an archetypal intellect, for which whatever it thinks exists.

[5]Beiser goes so far as to categorize Fichte as a pragmatic idealist (Beiser 2002, 218). Zöller, who highlights the duplicity of thinking and willing in Fichte's philosophical system, nevertheless argues that Fichte foregrounds willing as the primary activity of the I, especially in the later formulations of his Jena *Wissenschaftslehre* (Zöller 1998, 4, 71–82).

can only be striven towards, endlessly, and never actually attained. In exploring all the activity of the I, not only reflecting upon the subjective contributions to consciousness but also examining the conditions of reflection itself, Fichte was faced with the limits of the method of critical philosophy. Immediate self-awareness or intellectual intuition remains an ideal that eludes realization in finite human consciousness, an ideal that drives reflective activity forward but that also makes explicit the shortcomings of that activity. Unsatisfied with Kant's presentation of the unity of self-consciousness, Fichte opened philosophy to the unsettling prospect of unending critical reflection and necessary incompletion.

Fichte's emphases upon the activity of the I, upon freedom of will in our cognitive acts and representing the external world as a not-I determined through the I, ensured his reputation as a preeminent philosopher of subjectivity. Yet his critical idealism recognized that much remains constrained in human existence, intellectually as well as physically and socially. Our self-determination is inevitably constituted through a tension between our finitude and our ideal ends, between what is fixed and given, and what is open and yet to be realized. Like Kant, Fichte nevertheless held that critical reflection and the cultivation of reason is an ethical demand, and he gave the philosopher a privileged role in teaching us to think and act autonomously. Importantly, Fichte's idealism was not private and individualistic, but like Kant's premised upon intersubjectivity. But unlike Kant, Fichte was insistent that it as subjects acting in the world that we become aware of our freedom. In his 1796 *Foundations of Natural Law*, he argued that the discovery of moral consciousness depends upon the check of a not-I in the form of a summons [*Aufforderung*] of others that is at once a demand and a request, an incitement and an invitation. The summons of an intersubjective encounter implies mutual recognition and obligation, and is the reason for the development of individual self-consciousness and consciousness of freedom. The recognition of ourselves as free is dependent upon our recognition of others as free, with our rights to freedom theoretically, practically and socially conditioned by the demands and rights of others for freedom. The ideal end Fichte strove towards, then, was not just self-identity and an ethical demand to improve oneself, but also through self-improvement to improve society and to strive for social harmony. Even more than Kant, he appealed to the learned public as a critical tribunal, and went far beyond Kant in questioning traditional authorities, advocating revolutions in political and social structures as well as revolutions in philosophy (Fichte 1971, VI: 289–346/1987; 1971, III: 1–389/2000; La Vopa 2001). But again Fichte's radicalness did not only introduce critical reflection upon the limits of contemporary social structures and obligations, but also opened the prospect of endless change.

Fichte's *Wissenschaftslehre* thus interrogated not only the conditions of cognition, but also the conditions of transcendental idealism. His meta-critical philosophy focused upon the subjective contributions to cognition, examining what Kant assumed as facts of conscious and attempting to bring into philosophical reflection the activity of the I, the active deed [*Tathandlung*], constituting those facts. Schelling instead turned his attention to the objective side of cognition, critiquing both Kant's and Fichte's transcendental idealisms as inadequate in their representations of the

natural world, and arguing for the need for an independent philosophy of nature. Yet despite Schelling's insistent moves away from transcendental idealism, he repeatedly returned to its analysis of cognition. Indeed, in his various works he moved between the discourses of transcendental idealism and the philosophy of nature, making differing and often conflicting statements regarding their relationship. In his 1797 *Ideas towards a Philosophy of Nature*, he argued that "nature is only the visible organism of our understanding," after the method of transcendental philosophy, conceiving the real in terms of the ideal. But he also claimed that "*the ideal must arise out of the real and be explained from it*," giving priority to the philosophy of nature (1856–1861, II: 55–56/1976, V: 106–7/1988, 41–42).[6] In his 1800 *System of Transcendental Idealism* he conceded that "neither transcendental philosophy nor the philosophy of nature alone" is adequate; rather both are required, although thus "the two must be forever opposed, and can never merge into one" (1856–1861, III/1976, IX/1978, 331–32). Schelling's critical ethos was meta-critical, but in a different sense than Fichte's. He used transcendental philosophy and the philosophy of nature as tools to interrogate each other, each acting as at once the foundation and critique of the other. He drew analogies between both, arguing that the activities of nature and the activities of cognition offer reflections of each other. But after the method of Fichte's *Wissenschaftslehre*, he held that transcendental philosophy prevents the philosophy of nature from completion by continually questioning the conditions of determinate knowledge of natural powers. The philosophy of nature in turn marks the limit of transcendental philosophy, by drawing attention to a dark presence in cognition of the real that defies conceptual analysis. Schelling concluded that it is not possible to stand outside both or to decide between them, but only to examine critically the one through the lens of the other.

Schelling's philosophy of nature supplemented Fichte's *Wissenschaftslehre* and the focus of transcendental idealism upon the subjective contributions to cognition, by giving activity and life to the natural world without reducing it to abstract conception or metaphysical postulates. Fichte's attention upon the activity of the I meant that he gave nature a strictly negative character as a restraint upon subjective consciousness, the not-I as a check or op-positing of the activity of the I. Focusing upon subjective warrant for our cognitive claims, nature is cast solely as something other, a dead objectivity (Hegel 1969–1989, IV: 42, 51). Kant similarly reduced the material contributions to cognition to a mere something [*etwas*] or thinghood [*Sachheit*] lying beyond the boundary of sensation (A92-93/B125; A143/B182). If Kant allowed that the findings of natural science could be made determinate through philosophical analysis, he insisted that that analysis must begin with empirical phenomena and not speculations upon the inner nature of things. Schelling argued for pushing beyond Kant's settlement with appearances. While insisting that we know nothing at all except through experience, Schelling

[6]Page numbers for Schelling's works are from the *Sämmtliche Werke* (1856–1861) when included in the editions cited; when an edition does not reference the *Sämmtliche Werke*, its pagination is given separately.

contended that empirical science is concerned only with the "*surface* of nature;" if directed to what is "*objective*" in nature, it only "views its object in *being*," as a finished product. Schelling instead sought to bring into philosophical analysis the activity or productivity of nature, what is "non-objective in nature;" to regard "its object in *becoming*" (1856–1861, III/1976, VIII/2004, 274–83). He insisted his inquiry was accordingly necessarily speculative. Schelling's *Naturphilosophie* might seem to be an extravagant project for the turn of the nineteenth century. It might seem to defy the critical philosophies that challenged traditional metaphysics, questioned epistemic claims and pretensions, and reflected upon the historical limitations of contemporary philosophical systems. Yet Schelling no more hypostatized metaphysical powers constituting nature than Fichte hypostatized the subject as a metaphysical entity. He became deeply engaged with the material and contingent processes of the natural world, following closely the concrete investigations of contemporary natural science. He proposed a philosophy of nature, however, not a natural science. As a critical philosophy it interrogated the conclusions of those sciences, and pointed to an insurmountable irresolution in the determination of natural processes. In not settling with appearances, with what is objective in nature, and yet not then claiming access to the fundamental powers of nature, to simplest or final essences, Schelling's philosophy of nature speculated critically upon the endless becoming of nature, upon the non-objective, in which each power or form could be subject to further investigation.

An emphasis upon the critical character of Schelling's philosophy of nature suggests it was engaged in largely negative work, questioning the representation of the natural world of both transcendental idealism and natural science. But it also offered positive contributions to the investigation of nature through the notion of boundary concepts. In general terms, Schelling portrayed natural products as the relative equilibrium of opposed processes in the ongoing becoming of nature. Highlighting the free spontaneity and animation as well as the necessary limitations of the activity of the world, he contended that the interplay of productivity and constraint finds resolution in natural products, but that this resolution is only temporary as each product is continually subject to annihilation and renewed production. Schelling gave these general principles substance by introducing boundary concepts as tools of analysis for concrete contexts. Drawing upon contemporary natural science Schelling conceived the physical world through an opposition of gravity and light, and matter through an opposition of attractive and repulsive powers. He conceived living being as preserved through an opposition of inward inversion and receptivity to the stimulus of its surrounding environment, an opposition of the individuation of matter and outward formation. Schelling's contention was that the natural products taking specific material forms at specific junctures in the activity of nature can be investigated and comprehended through specific "boundary concepts of empirical natural science [*Grenzebegriffe der empirischen Naturlehre*]" (1856–1861, II: 386/1976, VI: 81–82). But he was insistent that such boundary concepts are not fundamental natural powers; indeed, gravity and light, attractive and repulsive powers, each inorganic and organic power might be subject to further analysis. Nature, as the middle factor in an endless becoming, is only apparent in particular

materialized forms, but each phenomenon is but a relative equilibrium of higher and lower processes. Different products at different degrees of organization and activity can be investigated through distinct methods and boundary conditions, without postulating those conditions as elemental. Thus Schelling's speculative philosophy of nature, as concerned with what is "non-objective in nature," the object in "its *becoming*," restricted itself to the quite modest activity of conceptualizing the boundary conditions of particular kinds of phenomena.

Schelling argued that the oppositions in our concepts of nature have their analogy in those of our mind. The boundary conditions marking stages in the dynamic becoming of the world are limited to our conceptions. The concepts in the philosophy of nature, of natural processes taking material form at the boundaries of opposed processes, reflect the processes of concept formation in transcendental idealism, as the activity of the I is constrained through encounters with the world. The I intuits itself as sensing and becomes conscious of the opposition between itself and things as the first step towards intelligence. To raise itself above intuition to reflection, the I produces a new opposition between the syntheses of outer sense and the syntheses or representations of inner sense. Judgment [*Urteil*] separates and compares intuition and conception, so that they can be related reflectively and freely, but a border [*Grenze*] and opposition [*Gegensatz*] is thus generated that must be traversed with a band [*Band*] or mediating link [*Mittelglied*]. For Schelling, transcendental idealism thus reveals the dialectic of the mind, with each act of cognition taking place at a boundary between spontaneity and limitation, opposition and synthesis. Each concept is a product of this dialectic, the "boundary concepts of empirical natural science" not only expressing the interplay between activity and constraint in nature, but also in turn the product of such an interplay in the mind. Critically reflecting upon the dialectic in every act of judgment and enfolded in every concept, Schelling concluded that the oppositions in nature reproduce those of cognition, with nature and mind subject to the same processes (1856–1861, III/1976, IX/1978, 389–530). The dialectical form of our concepts of nature reflects our embeddedness in nature as thinking and living beings engaged with the world. Schelling claimed that the true representation of science is "that it is the development of a living actual being that presents itself within it" (1856–1861, VIII/2000, 199). We are necessarily in a world of our own thinking and acting, even as we as thinking and acting beings are constrained and produced by that world.

In drawing analogies between transcendental idealism and the philosophy of nature Schelling did not give priority to one in our understanding of the world, but rather indicated the limitations of each. That our concepts reflect the processes of nature shows our inability to transcend the natural processes from which our mind develops. That the activity of nature is rendered in terms of the processes of the mind shows our inability to know nature objectively independently of subjective thinking. Schelling did not follow Fichte in striving to overcome the dialectic of the I's activity, to progress towards self-identity and self-determination, even if only as an ideal. He accepted that our embeddedness in nature is fundamental, and not a constraint we should strive to overcome. Yet he did not then accept Kant's settlement, his reconciliation to appearances. He rejected Kant's depiction

of the terra firma of phenomena and the determinate concepts of science, finding in its stead an ever-shifting terrain. Situated in the midst of the world in endless becoming, Schelling was unsettled by the flux, by the contingencies and tensions of both mind and nature. His meta-critical ethos made unease inevitable. But if unable to accept any determinate concept of subjectivity or objectivity, even as an ideal end or necessary limit, Schelling argued for the value of boundary concepts as epistemic tools for exploring the life of the world and the mind. His meta-critique exposed the lack of objective or subjective grounding for our epistemic claims, and made a virtue of acknowledging our place within the world.

The writings of Schelling and Fichte can appear impenetrable when considered from outside the tradition of critical idealism. Part of that impenetrability is due to the technical vocabulary of the post-Kantian tradition in which they were written, and their introduction of new and unusual terms. They both also have a tendency to reflexive excess. It is thus not surprising that mid-nineteenth century scientists viewing German idealism from a distance found an overactive subjectivity that warranted disciplining. But Daston's and Galison's work has shown us that we should not uncritically accept the nineteenth-century's notion of mechanical objectivity and its correspondent notion of an ascetic scientific subject, and similarly we should not uncritically accept its hasty dismals of German idealism. German idealism was informed by an epistemic virtue of critique, an ethos taken up in the Enlightenment and rigorously applied in Kant's philosophy, and given meta-critical force by figures like Fichte and Schelling. The philosophies of Kant, and even Fichte and Schelling, were concerned to reflect critically upon our conceptions of objectivity and subjectivity. Kant's transcendental idealism argued for an ethos of epistemic modesty, through its critique of pure reason and reconciliation of cognition to appearances, and its argument that mature judgment must be aware of both the rightful claims and limitations of our capacity for self-determination. Fichte and Schelling rejected some of the constraints Kant placed upon philosophy, but by extending his critique to interrogate some of the assumptions Kant excluded from reflection. They thus introduced a meta-critique that reflected not only upon our cognitive acts but also upon Kant's transcendental reflections upon those cognitive acts, pushing even further than Kant the problematization of notions of objectivity and subjectivity. Fichte's *Wissenschaftslehre* sought to bring into reflection the activities of the I Kant left unanalyzed, interrogating the transcendental warrants he introduced for our cognitive claims and arguing for freedom in thinking as well as in acting. Schelling supplemented Fichte's transcendental idealism with a philosophy of nature that sought to investigate the boundary conditions of natural phenomena in the dynamic life of the world, conceiving these boundary conditions in analogy with the dialectic of thinking. But whereas Kant argued that the limits of critical philosophy lay in the right and obligation to be satisfied with appearances, for Fichte and Schelling it lay in recognizing that our philosophical inquiries into subjective and objective activity are inevitably incomplete. In questioning the terms of the Kantian settlement with appearances, they did not do so to warrant metaphysical postulates, but instead retained the ethos of critique as a limit-attitude; yet their focus was on the limits of philosophy and the unsettling prospect of critical reflection as an

endless task. Thus while the nineteenth-century critiques of the excesses of German idealism have some warrant, their simplistic reading of complex meta-critical texts have produced a particular and skewed history of objectivity and subjectivity. The significant contribution of Daston's and Galison's work is its stimulus for us to continue to reexamine that history.

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