

# IF SCIENCE HAS NO ESSENCE, HOW CAN IT BE?

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In his recent work, Michael Friedman argues that, contrary to the standard interpretation which depicts the logical positivists as a species of especially rigorous empiricists, they are better seen as in fact much more influenced

by late nineteen- and early twentieth-century developments in the foundations of geometry, logic, and mathematical physics to venture a profound transformation of the Kantian conception of synthetic a priori principles: principles that are necessary, certain, and unrevisable but also applicable to the natural world given in our sensible experience.<sup>1</sup>

Friedman's thesis is certainly revisionist, but as a matter of historical fact, the logical empiricists probably were as much influenced by the neo-Kantian tradition of transcendental philosophy as they were by Hume's empiricism.<sup>2</sup> At the very least, Friedman shows that we should call the movement "*logical empiricism*," not "*logical empiricism*." I have my doubts, however, about the philosophical conclusion he draws from this work about the "enduring legacy" of logical empiricism's defense of the a priori in science. More specifically, I am not convinced that Friedman's renewed defense of the a priori puts him in a position to offer a "complementary" perspective to the one Thomas Ryckman works out in his study of Hermann Weyl, Husserl, and the phenomenological foundations of mathematical physics. In this essay, I will try to explain my doubts—by starting with Friedman's conclusion, working backwards towards some of its premises, and finally comparing his position with Ryckman's. The point of my title is that the Weyl described in Ryckman's project, but probably not Friedman, is in a position to embrace the Husserlian idea that it is not the sciences, taken in themselves, but the perceptual life in which they originate, to which one must look for their "essential structures."<sup>3</sup>

## Rescuing the A Priori

### (Friedman's Retrieval of Carnap)

Setting the historical record straight is not, for Friedman, an end in itself. It is his vehicle for articulating a philosophical disappointment. When it comes to evaluating the logical empiricists' treatment of formal-logical methods in science, he complains, too many philosophers have tended to judge the movement in terms of the failure of specific projects like Carnap's *The Logical Syntax of Language*. In this way, Friedman argues, they obscure the important deeper (we should probably say Enlightenment) purpose that animates such projects. Carnap, for example, is not defending formal methods in science because he is a formalist. Rather, he wants to use these methods to "transform traditional philosophy into the new enterprise of language planning [in order] to bring peace and progress to the discipline" —just as "his work on 'the construction of an auxiliary language for international communication' is intended to contribute to world peace" (RLE, 232–33).

The story of how and why this dimension of Carnap's work was ignored is long and complicated, but what Friedman thinks was missed can be stated quickly. As Carnap viewed the intellectual landscape, science-minded philosophers were still failing to distinguish clearly between their own genuine formal-logical disputes concerning the non-empirical elements in scientific thinking and the "fruitless ontological disputes [they inherited] about the 'reality' or 'nature' of some contested class of entities" such as numbers. Regardless of what one thinks of Carnap's specific project, then, what his work most deeply intends is a radical reconceptualization of genuinely philosophical disputes, such that the fruitless (and hopelessly divisive) ones drop out. In Friedman's words, Carnap redefines the concern for a priori elements in science so that it is committed to nothing more than a "pragmatic" interest in "the logico-linguistic form in which the total language of science is to be cast." Once one attains a "Carnapian philosophical self-con-

sciousness,” says Freidman, one sees that this pragmatic question of language-planning has “no implications as to the ‘objects’ and ‘facts’ in the world” (RLE, 232).

From Friedman’s perspective, then, the logical empiricists were right to ground the possibility of science in a priori and ontologically uncommitted principles. Their mistake was to interpret these principles in terms of the imagery of “necessity, certainty, and unrevisability.” This mistake may ultimately have doomed their specific projects, but there is something profoundly right about their basic idea that science depends for its “objective validity and intersubjective communicability” upon “non-empirical principles.” Hence, with a nod toward Kuhn, Friedman concedes that it is wrong to conceive such principles as absolutely and timelessly fixed. But he concludes that in a modified form—as “relativized synthetic a priori principles” —they are indeed necessary for “constitutively framing the empirical advances of natural science.”<sup>4</sup>

As his paper makes plain, Friedman understands himself—and also Husserl—to be working within the neo-Kantian tradition of “transcendental” philosophy when he draws this conclusion. Synthetic a priori principles, even relativized ones, would still be able to account for the way the non-empirical and the empirical are related—to show, for example, “how the abstract mathematical structure of general relativity successively acquires its empirical applications and meaning.” And this, Friedman suggests, seems “analogous . . . to Husserl’s account, in the *Crisis*, of the origins of the mathematical science of geometry from the life-world” (8). In order to clarify Friedman’s position, and also to explain my misgivings about his analogy, I need to say something about his interpretation of Kant.

### **Transcendental Philosophy and Friedman’s Kant**

Friedman’s Kant, or at least the Kant of the First Critique’s “Transcendental Aesthetic” and “Analytic” as summarized in his paper, most closely resembles the Kant of the Marburg School of neo-Kantianism. For them, the basic project of Kant’s transcendental philosophy is to establish a metaphysical foundation for Newtonian physics. For Kant himself, ac-

ording to their interpretation, this project is worked out in terms of a sharp distinction between the faculties of sensibility and understanding. And the heart of the project is a transcendental analysis and defense of how purely intellectual concepts are schematized under the formal conditions of sensibility, so that the “application” of these concepts to perceptual experience—and thus the application of the basic theoretical premises of Newtonian physics to empirical research—is illuminated and justified. Given this interpretation of the First Critique, the subsequent history of Kant interpretation is depicted as centering on “an explicit rejection of Kant’s dualistic picture of the faculties of the mind,” together with a suppression of the doctrine of the schematism and its replacement by a more formal-mathematical account of the conditions for the application of scientific theories to empirical reality. According to Friedman, Husserl also belongs to this neo-Kantian tradition. His phenomenology, however,

is better positioned than both early logical empiricism and . . . [the Marburg neo-Kantians] to do justice to the actual empirical application of mathematical physics, since Husserl takes his starting point . . . from the concrete, immediately and perceptually given life-world constituting the basis of all human experience and activity and all science in particular. (4–5)

In other words, for Friedman the advantage of Husserl’s transcendentalism is that it embraces no fundamental dualism of sense and cognition, “and the sensible and empirical dimensions of experience are placed at the center.” And this, according to Friedman, is the Husserl known to and utilized by Hermann Weyl.

I have quoted generously from Friedman’s paper here in order to make clear how thoroughly Friedman means to connect Husserl with the neo-Kantian tradition. The Kant in his picture will, of course, strike many readers of Kant as anachronistic; but it may well be that Friedman interprets Kant through this narrow epistemological prism only in order to show in what terms Kant’s work influenced the Marburgers. To claim, however, that Husserl

belongs to this tradition seems to me—as I think it would also to Weyl—quite misleading. Let me outline this problem in terms of four features of Friedman’s Kant, considered in two pairs.

First, Kant himself is understood to have set up the problem of the relation of cognition and sense in an impossible way, and it is thus the mark of a good neo-Kantian to define their relation to Kant by rejecting his presumed epistemological dualism of cognition and sense—mainly, because it waters down the power of scientific reasoning by juxtaposing cognition with another faculty with which it can at best be merely coordinated, and to which it might at worst seem beholden. Second, and closely connected with the first point, neo-Kantians mostly ignore the doctrine of the schematism, since the rejection of epistemological dualism undermines the need for it. Taking these two points together, the result is a complete recasting of Kant’s original project, such that the transcendental analysis of the way scientific theories play a “constitutive” role in natural knowledge is secured against the (to the neo-Kantians) misleading idea that scientific cognition is somehow incurably dependent upon the “receptivity” of perceptual experience. In other words, to play Kant’s language off against Friedman’s, Kant’s original problem of the synthetic a priori is now made entirely an issue for the understanding, and the First Critique’s problem of synthesis is transformed into the problem of “application.”

It is not just Kant’s problem, however, that is transformed. The very idea of being a transcendental philosopher is redefined. A third feature of Friedman’s account is that all transcendental philosophers—from Kant himself to the neo-Kantians through the logical empiricists to Husserl and beyond—are first and foremost philosophers of science, and more specifically, philosophers of science whose view of science tends to privilege mathematical physics. For Kantians so described, the second half of the First Critique together with the rest of Kant’s critical project is implicitly placed outside philosophy in its primary sense. And with this conception of transcendental philosophy’s primary aim comes, fourth, what might be called a pre-Kantian or even Cartesian reinterpretation of the basic

outlook of the transcendental philosopher. It is, in any case, objectivist. That is, transcendental philosophers are presumed, as much as possible, to have no specific standpoint or agenda of their own, aside from a concern to clarify and defend the essential structures of science, and to extend the reach and significance of its conception of “knowledge.” In other words, in this neo-Kantian story, the tradition of Hegel does not exist, for Hegel does not address Kant first as a fellow philosopher of science; nor does he begin with the First Critique’s transcendental analyses. For Hegel, the main problem with Kant’s critical philosophy is its promising but unsatisfactorily conceived idea of transcendental reflection. For having declared his concern equally for natural knowledge, for morality, and for the problematic character of speculations beyond both of these domains, Kant fails to clarify the transcendental posture from which all of these concerns can be fairly treated.

At this point, we might go in either of two directions. We could try to figure out how Friedman’s own conception of transcendental philosophy must in principle already involve a turn away from this neo-Kantian orientation, if he is serious about defending the a priori only in a *relativized* form and for strictly *pragmatic* purposes. Here, however, it seems more appropriate to ask instead whether Husserl should be linked up so strongly with transcendental philosophy in this neo-Kantian sense. In my view, he should not.

One way to put my objection is to observe that whatever inspiration Husserl might have drawn from Marburg neo-Kantianism, it is deeply disrupted from several directions by other strains of thought that—at least to Husserl—possessed much more promising conceptions of philosophy. Husserl, to put it crudely, could never have become a phenomenologist by doing neo-Kantian philosophy of natural science . . . plus something. His reconstructions of the life-world origins of mathematics and physics do not develop first, for their own sake, and then later serve as models for other reconstructions. His famous slogan, “Back to the things themselves,” has in this respect something incurably ontological about it. To take two examples, for Husserl, psychologistic accounts of mathematics do not understand what mathematical entities and op-

erations *are*. And natural scientific accounts of physical objects do not describe how we actually *have* the world perceptually. Moreover, in both cases, Husserl thinks it is ontological arrogance to assume that the scientific accounts are philosophically superior. From his phenomenological perspective, when these accounts are taken as fundamental, they actually get things backwards.

In short, Husserl starts from the conviction that human life begins and ends in the midst of an irreducible ontological plurality, and that a philosophy that starts out with, say, the meta-scientific concerns of the Marburg neo-Kantians inevitably comes too late, and with a reductive eye, to this plurality. For Husserl—and for phenomenologists generally—philosophy must begin, not with something like “coordinating” our most abstract and sophisticated physical theories with empirical research and ordinary life, but by attending to the way things are already variously given to us “in” life. Indeed, it is precisely because of this conviction that Husserl can earn Friedman’s praise for “placing experience . . . in the center” of philosophy. And it would thus appear that Ryckman correctly identifies as genuinely Husserlian the numerous passages in Weyl’s *Space-Time-Matter* that give epistemological priority to “the real world, each of its components and all their determinations,” as they are “given” in conscious experience “just as I have it.”<sup>5</sup>

As is well-known, precisely how one conceives this givenness, its conscious having, and the intentional relation this involves are all issues to which Husserl returned repeatedly throughout his life. If, however, this makes Husserl’s phenomenology something of a moving target, it also confirms from another angle why he could not be a neo-Kantian. It is not just that his philosophy is fed by other sources. It is that Husserl takes his encounters with multiple streams of thought as requiring a critically reflective investigation of *what it takes to become a phenomenological philosopher*. For Friedman’s neo-Kantians, philosophy simply starts out with extant philosophical accounts of science and improves on or replaces them; for Husserl, philosophy must begin with self-criticism. The problem, for Husserl, is that the several philosophies of his day are conceptually sophisticated and

experientially naive. They offer detailed analyses of the logical, mathematical, and empirical features of scientific knowledge; but their understanding of the relation of scientific knowers to the sorts of phenomena they claim to know, and their view of the relation of science to perceptual life, both rely on conceptions of experience that are themselves tainted by various myths, traditional prejudices, and half-baked extrapolations from the sciences themselves.

The story of Husserl’s struggles to explain how one can and why one should become a phenomenological philosopher is long and complicated. For present purposes, let me try to make my point indirectly, by referring to another strain of philosophy to which Husserl reacted—namely, the other neo-Kantianism, the so-called Southwest or Baden school.<sup>6</sup>

### **Natural vs. Human Science: An Ontological Difference**

For Husserl and most of his contemporaries, the grandfather of the Baden school is Dilthey. Dilthey was famous, of course, as the pioneering “philosopher of the human sciences,” the first person to establish an epistemology of these sciences side by side with the epistemology of the natural sciences. For Husserl, however, Dilthey deserves greater attention than his progeny. For unlike their “logic of historical science,” Dilthey’s epistemic distinction is explicitly grounded in an ontological one. It is not that human actions cannot be explained; it’s that they can also be understood. We are, says Dilthey, both natural and psychic-historical beings; hence, *Verstehen* is not another way to look at reality; it is the right way to look at another reality. The epistemic distinctiveness of *Verstehen*, like the epistemic distinctiveness of natural scientific *Erklären*, is thus ultimately a function of the demands of its subject matter. Here Dilthey finds the reason that philosophers of science who extrapolate from the methods of, say, mathematical physics to Science with a capital S offer such forced and reductive accounts of disciplines like history, political economy, psychology, and philology. The externalizing outlook, the quantification of findings, and the concern for prediction are all suitable for sciences that want to explain nature, but not for

disciplines that try to understand human affairs as they are directly lived through (*erlebt*).<sup>7</sup> It is not that the characteristics of explanation are its misfortune; it is just that there is also another ontological possibility—namely, the study of other aspects of our relations to our surroundings besides those which can be handled abstractly, mathematically, and from the outside. For the sake of this other possibility, we need an alternative sort of procedure that is suitable for studying, in Dilthey's phrasing, the "total nexus of psychic/historical reality" as that is "possessed" in lived experiences (*Erlebnisse*).

Like Husserl, then, Dilthey is no revisionist neo-Kantian of the kind Friedman describes. He is resolutely anti-positivist. Instead of starting with the fact of natural scientific success, embracing the epistemic principles of its "observational" orientation, and turning to the usual task of formalizing and extending the reach of its procedures, Dilthey begins by challenging the hegemony of this very orientation. We "have" ourselves and our surroundings in another, more direct way than through the external confrontations and abstract explanations of a spectator. In contrast to experimentally enhanced observation, he argues, lived experience

is a distinctive and characteristic way in which reality is there-for-me. . . . It does not confront me as perceived or represented . . . but is there-for-me because I have a reflexive awareness of it, because I possess it *unmediated* and as in some sense belonging to me.<sup>8</sup>

Observers can know nothing of this, since for them it is a matter of epistemological principle that one is only permitted to say, of this experiencing, that it is going on inside an observable body.

What Husserl appreciates in Dilthey, then, is his clear recognition that if one's ontological default position is to define "experience" and "reality" in deference to the natural sciences, this is ultimately a function of ontological bias, not just epistemic ignorance or overly enthusiastic preference. The problem must be addressed on two fronts. First, there must be a critique of philosophical objectivism itself, not

just good arguments for a second kind of scientific logic to study another kind of reality. One must argue that the background imagery of "knowing subject" and "external world" defines a very heavily committed and anything but neutral orientation—one which thus cannot be universalized into the basic frame of reference for all articulations of experience. Second, the success of such a critique depends upon developing precisely what Dilthey calls an alternative and more perceptive "reflexive awareness" of experience generally. And in this idea, according to Husserl, lie both Dilthey's greatest genius and most serious limitation. To put the issue in Husserl's terms, if an objectivist philosophy of "knowing subject" and "external object" is not phenomenological, then how would a truly phenomenological philosophy proceed? Dilthey raises this question but fails to answer it.

### Phenomenology vs. the "Standpoint of Life"

As Husserl realized,<sup>9</sup> the radical implication of Dilthey's original project is that the possibility of two kinds of science is ultimately not a question about two subject matters, any more than it is a question about two methods for these subject matters. It is a question about the philosophical orientation from which distinctions about subject matters and methods can be generated. For Dilthey, the appropriate orientation is cultivation of a self-consciousness of "the standpoint of life" itself. He argues that if "immediately experienced life as a distinctive . . . way in which reality is there-for-me" is the subject matter of the human sciences, it is also, more fundamentally, the mode of existence in which we already *pre-scientifically understand* and experience all our "manifold powers"—including our powers for developing both natural and human scientific knowledge. It is from this standpoint that one is able to cultivate a kind of thoughtfully enhanced philosophical self-awareness—a "*Selbstbesinnung*"—through which both "understanding life" and "explaining nature" may equally be recognized as expressing "lived through" possibilities, and neither is automatically made the model for all knowledge and every expression of life.<sup>10</sup>



Such remarks as these—remarks that suggest for philosophy an orientation from which one becomes aware of all our possibilities without playing ontological favorites—led both Husserl and the early Heidegger to find radically “phenomenological” implications in Dilthey’s labors. But whereas Heidegger construes his own hermeneutic phenomenology in *Being and Time* as a positive transformation of Dilthey’s “reflections from the standpoint of life,”<sup>11</sup> Husserl sees his phenomenology as its necessary replacement. Dilthey characterizes the experiential possession of life as *both* the source of the basic ontological and epistemological constructs and categories for the two sorts of science *and* as the subject matter of the human sciences. How, asks Husserl, does he know to do this? To understand that the experiential possession of life is both a source of ontologically possible practices and a subject matter for study by one of these practices, Dilthey must himself be describing life from a standpoint that is not that of an epistemologist of either sort of science. But Husserl complains, even in his late works Dilthey’s descriptions of this standpoint are labeled “psychological” and “historical.” Husserl hears these adjectives as defining a standpoint that is essentially unphenomenological and scientific (whether natural or *geistig* makes no difference). And, argues Husserl, from the fact that experienced life can be found to have psychic and historical features, it does not follow that it essentially *is* psychic and historical, or that all of its expressions are at bottom just psychic/historical phenomena.

In short, Husserl argues that Dilthey leaves us with the exciting prospect of a much widened agenda of philosophical concerns about science—but at the same time discredits without adequately replacing the old “spectator’s” standpoint from which this agenda might be addressed. Today, many thinkers join Dilthey and Husserl in refusing to privilege the objectivistic, or spectator’s viewpoint and nearly everyone wants to put logical empiricism behind them. It is also clear, however, that there are deep disagreements over what perspective post-positivist philosophizing about science should adopt. By way of example—and I shall conclude with this point—just look at the differences between Friedman and Ryckman/Weyl’s treatment of the issue of the

relation between mathematical physics and perceptual experience.

### Philosophy of Science after Logical Empiricism

Although Friedman does not see himself as a Carnapian, it seems to me that as his writings depict it, his own sort of “transcendental-” philosophical defense of a relativized a priori dimension in scientific knowledge is still heavily invested with many of the same assumptions that put Marburg neo-Kantianism so strongly at odds with Husserl’s phenomenology. This sort of philosophy simply begins with the question of “applying” the theories of mathematical physics to empirical research and ordinary perception. It ignores—or better, distorts by an excessively narrow and natural science-minded initial focus—the overall concern of Kant’s *Critical Philosophy* with all the possible relations between the empirical and the non-empirical, and then preoccupies itself with the remaining task of the relating *of* understanding *to* sense that it discerns in the first half of the *First Critique*. Kant’s own *synthetic* account of this relation is rejected in favor of one that claims that this relation, whatever its specific linguistic form, is primarily a matter of constitutive concepts being brought to bear on the empirical.

In his accounts of this application, moreover, Friedman makes no clear distinction between empirical research and ordinary perception; he thus never asks whether the whole problem of the relation between scientific theory and human life—not just the problem of the relation between scientific theory and empirical research—can be handled as an “application” problem. Finally, this philosophy is characterized as taking an entirely “pragmatic” approach to the issue of application—that is, an approach allegedly involving no ontological commitments but simply offering guidance for historical reconstructions of how “the abstract mathematical structure of [say] general relativity [theory] . . . successively acquires empirical . . . meaning” (8).

All of these features of the transcendental position Friedman describes, if I have rightly understood them, would be rejected by Husserl on phenomenological grounds. Friedman’s epistemic reflections on the necessary

conditions for bringing mathematical physics to bear on “the *empirical*” express a transcendental philosophy with an entirely different point of departure and center of gravity from Husserl’s “*originative* [phenomenological] reflection” on *experience*. Friedman rightly notes that in Husserl’s phenomenology, “the sensible and empirical dimensions of experience are placed at the center rather than the margins” (6). In doing this, however, Husserl’s aim is not to correct any imbalance between abstract theory and sensibility that some neo-Kantians find in Kant’s *Critique*. Rather, he wants to make ordinary perceptual life philosophy’s primary topic, in order to insure that phenomenological reflection—better than any Diltheyan *Selbstbesinnung* from the standpoint of life—develops an adequate account of this life *before* attempting either to retrace the development of mathematical physics out of it or to historically reconstruct the path by which mathematical physics, once developed, might then seek to relate itself back either to “empirical research” or to perceptual life itself.

Friedman also notes Husserl’s strenuous objection to the sort of “regressive transcendental argumentation,” typical of that neo-Kantian and positivistic philosophies of science, in which the essence of science is somehow rationally reconstructed by starting from the factual existence of scientific practices (9). Husserl’s objection, however, is not quite what Friedman appears to think. For Husserl, the problem with the idea of “philosophy of science as rational reconstruction” is not simply that its constructions are “insufficiently grounded intuitively.” Were this the case, one might assume that once its constructive method is sufficiently grounded, it could take up its task again with greater justification—perhaps this time to develop “historical” reconstructions of the sort Friedman favors. Yet for Husserl, the very idea of philosophy as reconstruction is itself the problem. It reflects commitments to old assumptions about logic, science, knowledge, and experience that, taken together, express a kind of refusal to acknowledge “intuitive grounding” as a necessity—and of course have an objectivistic story about this that makes Husserl’s phenomenology look like a “subjectivistic” retreat from genuine philosophy.

To put the point another way, Friedman talks often about relativizing the old notion of necessary and certain conditions, but there is no correlative talk about relativizing the “Carnapian self-consciousness” that embraces the old notion. Imagine logical empiricists reading Friedman’s work. Perhaps they would agree with the history. But would they agree that the time has come to abandon objectivism concerning the philosophical search for a priori principles? Granted, a few more decades have passed, and the issue of non-empirical elements in science is still not settled. But why should the continuation—or even a Kuhnian exacerbation—of this familiar pattern make enough difference now to dictate the abandonment of the original search for absolute principles?

The problem, I think, lies with the fact that the neo-Kantian idea of absolute “foundations” for geometry, logic, and mathematical physics actually influences logical empiricism in two ways, not one. Friedman is certainly right to identify this influence in connection with its conception of the extra-empirical conditions of science. Indeed, I would venture further and say the power of the imagery of necessary, certain, and unrevisable foundations is precisely the Trojan horse that made logical empiricists ontologically confident that they could still be seeking the “essence” of science, at the very moment when they were rejecting all ontological claims as cognitively worthless.

What Friedman does not stress, however, is that this same imagery also seems to inspire their conception of philosophy. That is, the idea of necessity, certainty, and unrevisability informs not just the logical empiricists’ conception of their topic, but also their understanding of the proper orientation for the pursuit of this topic. The idea of “relativized” a priori conditions for science and the idea of a philosophy that can make itself “anti-ontologically pragmatic” still seem expressive of the old objectivist philosophies. Pragmatists of this kind could still imagine themselves beginning, as it were, by neutrally bringing before them the abstract theories and the empirical practices of science, and then “reconstructing” how it is a priori possible that these theories come to apply to the practices. The only change would be that reconstructions would

now be conceived as ongoing, relative in the sense that “empirical application” would be viewed dynamically, as a historical process, not just statically, as having a logical structure. None of this provides any incentive for tracing the application process “all the way back” to the life-world. In fact, it remains silent about precisely the reigning naturalistic view, held by the logical empiricists and opposed by Husserl, that the only way to genuinely illuminate the experienced world is through the empirical study of it.

What, on the other hand, if Ryckman is right about Weyl—or at least about Weyl’s philosophy of mathematics between 1919 and the

early 1920s? At the very least, Weyl’s work would then be an illuminating case study of just what it might mean to “maintain a phenomenological foundation for mathematical and physical cognition” (PRGP, 70). I have a still greater interest, however, in Ryckman’s remarks about Weyl’s phenomenologically grounded conviction that “all a priori statements in physics have their origin in symmetry” (85). What would happen to the philosophy of science if “origin” in this phenomenological sense of the term, rather than “application” in the neo-Kantian sense of the term, were to become its watchword?

## ENDNOTES

1. Michael Friedman, *Reconsidering Logical Empiricism* (Cambridge: Cambridge University Press, 1999), xv [hereafter, RLE]. The view, of course, is controversial, but I think fundamentally right at least as a corrective. Consider, e.g., Carnap’s notorious criticism of Heidegger’s “*Das Nichts selbst nichtet*,” from *Was Ist Metaphysik?* It is often claimed, in reliance on the radical empiricist interpretation of logical positivism, that the heart of Carnap’s criticism lies in the fact that this sentence, considered carefully and logically as a proposition, cannot have meaning because it is unverifiable in terms of sense experience. As Friedman rightly argues, however, this view is incorrect. The heart of Carnap’s criticism lies in the fact that, considered as a proposition, “Nothingness itself nothings” violates the logical form of the concept of *Nichts* by presenting itself as both a substantive noun and as a verb, when modern principles of logic show that it is neither. Indeed, as Friedman notes, not only is Carnap clear about this being the basis of his critique, but he sees that Heidegger would understand it thoroughly and *precisely for this reason* be unimpressed by it, since it privileges logic and science as the fundamental tests for meaning. See, Michael Friedman, *A Parting of the Ways: Carnap, Cassirer, Heidegger* (Peru, IL: Open Court, 2000), 11–14 [hereafter, PW].
2. In the so-called Yellow Brochure, Neurath/Carnap/Hahn identify logical empiricism as a philosophy with just two primary commitments—to work out a formal-reconstructive analysis of the scientific method and to be empiricist concerning the range of this method’s application. Friedman’s work does a good job showing how the significance of the first commitment has been underplayed in the standard accounts of the logical empiricists, but he does not really consider the issue of how to weigh the relative importance of the two commitments, either in their actual work and/or in their explicit self-conceptions. His historical thesis is thus still open to the objection that he has not really established the *priority* of the first commitment. See Otto Neurath, Rudolf Carnap, and Hans Hahn, “The Scientific Conception of the World: The Vienna Circle,” in *Empiricism and Sociology*, ed. M. Neurath and R. Cohen (Dordrecht: D. Reidel, 1973), 1–20.
3. That this shift of location may also raise serious questions about the very idea of “essential” structures, is an issue that falls outside the scope of this paper. It is, of course, the issue with which Heidegger was already struggling in the decade before *Being and Time*, when he began to experiment with the possibility of developing a “formally indicative” language that could lead thought to the matters themselves, but avoid the implication that what was being said about those matters was already more important, and more telling, than what the matters themselves might still tell us if they continued to be taken more seriously than the concepts and judgments already worked out about them at any given point.
4. RLE, xv. Friedman’s position is that even the logical empiricists themselves were working toward such a position, but they failed to establish it (*ibid.*, 59–70). See also, Friedman’s *Dynamics of Reason*



- (Stanford, CA: Center for the Study of Language and Information, 2001), esp. 71–82.
5. Thomas A. Ryckman, “The Philosophical Roots of the Gauge Principle: Weyl and Transcendental Phenomenological Idealism [hereafter, PRGP],” in *Symmetries in Physics: Philosophical Reflections*, ed. Katherine Brading and Elena Castellani (Cambridge: Cambridge University Press, 2003), 64. The discussion begun in this article is now superceded by Ryckman’s much more thorough study in *The Reign of Relativity: Philosophy in Physics 1915–1925* (Oxford: Oxford University Press, 2004).
  6. I note in passing that Friedman treats this “other” neo-Kantian school—e.g., in setting the background for his discussion of the relations between Carnap and Heidegger—primarily in terms of its engagement with the then-current debates over the philosophy of natural science. It is true, of course, that it was involved in these debates, but it is quite misleading to see people like Wilhelm Windelband and Heinrich Rickert, let alone Emil Lask, as associated primarily with problems that they all agree reflect a set of epistemic convictions which already possess an undeserved hegemony over the reigning ideas of what philosophy is and does. See, e.g., PW, 25–37. For an alternative treatment of Lask, see Theodore Kisiel, “Why Students of Heidegger Will Have to Read Emil Lask,” in *Heidegger’s Way of Thought: Critical and Interpretive Signposts* (New York: Continuum, 2002), 101–36.
  7. E.g., Wilhelm Dilthey, *Gesammelte Schriften* [hereafter, GS], 23 vols. to date (Stuttgart: B.G. Teubner; and Göttingen: Vandenhoeck and Ruprecht, 1913–), GS 1: 359–73; *Selected Works*, Vol. 1: *Introduction to the Human Sciences* [hereafter SW 1], trans. Rudolf A. Makkreel, et al. (Princeton: Princeton University Press, 1989), 192–206.
  8. GS 6: 313; *Selected Works*, Vol. 5: *Poetry and Experience*, trans. Rudolf A. Makkreel, et al. (Princeton: Princeton University Press, 1985), 223, trans. slightly altered.
  9. Just when Husserl realized this, and how much his eventual discussion of it owes to Heidegger is a contested issue. For recent discussion, see e.g., Donn Welton, *The Other Husserl: The Horizons of Transcendental Philosophy* (Bloomington: Indiana University Press, 2001), 325–26, and references cited there.
  10. Though Dilthey’s identification of the standpoint of life as the proper orientation for *Selbstbesinnung* is late in developing, the idea itself is not. The idea of a *Selbstbesinnung* that seeks “the foundation for action as well as for thought” and that is wide enough to be philosophically concerned with “differentiating among the facts of consciousness as well as the articulations based on this differentiation” appears as early as the so-called “Breslau Draft” (circa 1880) of what was to be Book Four, Section One, of the *Einleitung’s* second volume (GS 19:79–80, SW1:268). In what follows, I treat this notion entirely from the standpoint of Husserl—with whose interpretation of it I entirely disagree. It is Husserl’s habit to read Dilthey’s notions of the “psychological” and “historical” as regressively as possible, such that they are always part of what blocks the development of phenomenology, never anticipations of it. Like Heidegger, I read Dilthey’s notions of “psychology” and “history” more generously, especially when they are used adjectivally to characterize the sort of reflectiveness about “life as it is lived-through” that Dilthey increasingly presents as the appropriate attitude for someone to take on the whole question of the grounds and relationships between various epistemologies and research paradigms. Here, Dilthey is better seen as “on the way” toward Heidegger’s analysis of Dasein than as regressively clinging to pre-phenomenological, introspective and historical-factual explanations of consciousness. See note 11, below; and also Rudolf A. Makkreel, *Dilthey: Philosopher of the Human Studies*, 2nd ed. (Princeton: Princeton University Press, 1992), 428–30.
  11. See my “Heidegger’s ‘Appropriation’ of Dilthey Before *Being and Time*,” *Journal of the History of Philosophy*, 35 (1997): 99–121.

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