Logic and Metaphysics in the Early 20th Century

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The traditional interpretation of Carnap's 1932 paper, "The Elimination of Metaphysics Through Logical Analysis of Language," [1] is that is a poor reading of Heidegger. However, recent works have come to reject this reading. Although Carnap's paper itself fails on several fronts, it is indicative of the overall character of his project, and there is good reason to suppose that Carnap would read Heidegger seriously. In fact, the two authors share many of the same predispositions and assumptions. In this paper, I wish to explore these undercurrents, and to expose the origin of the difference between these giants of 20th century philosophy. First I will go over the shared philosophical backgrounds, from the dominant Neo-Kantian philosophy and the influence of Husserl, to the political influences which fuel their projects. Secondly, I will take a deeper dive into how their philosophical projects were fleshed out, focusing particularly on their conceptions of object, science, language, and the role of logic in philosophy. Finally, I will take a look at the famous debate on the nature of metaphysics, and hopefully draw some insightful conclusions and applications to contemporary approaches to philosophy.

Historical Background, Political Origins

Heidegger and Carnap share a cultural background which informs their philosophical insights and methodologies. Both thinkers are generally oriented by the same question: What do we do about the incommensurability of facts and meaning?

By facts, I intend empirical facts, truths about the world disclosed to us by scientific research. By meaning, I intend meaning in life; not semantic meaning in the sense of pointing, but in the sense of fulfillment, guidance, and valuation.

In his 1917 lecture, "Science as a Vocation," Max Weber laid out the limitations of science for guidance in our lives. To Weber, there are only three ways in which science can guide our thought. First, it provides a clear means of inquiry about things in the

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1. I will refer to this paper as the *Uberwindung*.

world through its empirical method. Second, it gives us a theory of causality which we can use to determine with high accuracy the results of our actions. Finally, it provides us a means of analyzing our basic attitudes with mathematical logic. Although the sciences can and should provide us a method of analyzing our beliefs, it cannot then tell us which things to value. It is entirely beyond the scope of the sciences to provide us reasons to act. He brings these limitations to the fore in order to stop the student population's desire for an "academic prophet" who could quell their disenchantment. Industrial production and advances in empirical science had lead to a crisis of confidence in theology; without theological faith, there was no order by which to live. So, the question of the age is as above: What are we to do about the incommensurability of facts and meaning?

> Under these internal presuppositions, what is the meaning of science as a vocation, now after all these former illusions, the 'way to true being,' the 'way to true art,' the 'way to true nature,' the 'way to true God,' the 'way to true happiness,' have been dispelled? Tolstoy has given the simplest answer, with the words: 'Science is meaningless because it gives no answer to our question, the only question important for us: "What shall we do and how shall we live?" That science does not give an answer to this is indisputable. The only question that remains is the sense in which science gives 'no' answer, and whether or not science might yet be of some use to the one who puts the question correctly. (Weber 2014, 139)

For Carnap and his Vienna Circle, the limitations of science are themselves the limitations of knowledge. Anything which can be said about material things (including individuals and their societies) can be stated clearly, in scientific language. The rise of sociology as a discipline, with Weber and Durkheim empiricizing questions typically reserved for philosophy, alongside theories of linguistic logic by Russell and Wittgenstein, provided further fuel for their attitude. Metaphysical pronouncements outside the scope of logical analysis – about abstract essences, ethics, or politics – are considered "nonsense." This term is not to be considered a complete dismissal, however; the scientific worldview is meant to "serve life", not the other way around. In the "manifesto" of their group, "The Scientific Conception of the World" (Hahn, Neurath,

and Carnap 1973), they explicitly link their worldview with the socialist movements of the early 20th century. They acknowledge a widespread disenchantment among Weberian lines, connected with the industrial mode of production. The European public "with their socialist attitudes tend to lean towards a down-to-earth empricist view. In previous times *materialism* was the expression of this view; meanwhile, however, modern empiricism has ... taken a strong shape in the *scientific world-conception.*" (Hahn, Neurath, and Carnap 1973, 21–22)

Meanwhile, Heidegger, influenced by Gogarten and his dialectical theology, would argue for a radical conservatism which sought definite meaning beyond scientific method. In order to preserve "the particular rigour of the humanities," Heidegger would offer an analysis of our emotive, factical nature, and in so doing would offer an analysis of the essential nature of being. If the sciences can provide us with the particular facts of their disciplines, and nothing further, Heidegger calls on us to examine the "nothing further" which by its nature sets the limitations of what can be known about beings. Similar to Kant, he is asking us to examine our intuitions in order to found our scientific knowledge. Influenced by Edmund Husserl, he takes on a phenomenological hermeneutic of our lived experience in order to found our intuitions, and thus to examine what gives life meaning, in addition to examining the basis for our scientific attitude. The scientific worldview is, after all, one among many. To Carnap, as to Wittgenstein, ethics seems to be matter of preference. If we are to save ethics, then, we need to step beyond science. (Stone 2017) provides an extensive analysis of the general project of overcoming Kantian metaphysics, through Husserl, with the intention of saving ethics.

The general conception of ethics which our authors offer differ dramatically, though both are only implied in their philosophy, and made explicit in their lives.

So we have shown that both Heidegger and Carnap were driven to exclude ethics from their projects by a preference for an analysis of factical existence. Both thinkers agree with Weber that science is limited in its application to affairs of life, but their

thoughts differ dramatically in application of and justification for this notion. In the next section I will examine Heidegger and Carnap's relation to material analysis through this existential lens.

Existential Material Analysis

An important aspect of Heidegger's philosophy is his anti-Cartesian project. In both Heidegger and Carnap, there is a focus on lived experience. Descartes' philosophical project - which highly influenced Enlightenment thinking - begins with radical doubt. Doubting all experience, we are left with only a subject, the I of experience. From this radical subjectivity, we build up the external world. So, for Descartes, essence precedes existence; metaphysics begins from an intellectual basis. Sensory experience is justified through an appeal to our mental faculties. In contrast to this, Heidegger and Carnap both reject the primacy of essence. In the scientific world-conception, we proceed from our senses to make general claims about the world through logical analysis. Essence is rejected; only what can be verified empirically is accepted as real. Metaphysics, as purely intellectual, is rejected as a comportment, an attitude toward the world. As Heidegger saw, and as many critics of the Vienna Circle have pointed out, this rejection of the metaphysical does no good to explain why the scientific world-conception should itself be accepted; it is a metaphysical claim without justification. The positivist would of course respond that there *could* be no verifiable justification; while we are free to debate how we ought to live and comport ourselves, this goes beyond the scope of knowledge, and to claim otherwise is empty pretension. Heidegger, on the other hand, does not proceed from the strict demarcations of science, but rather finds his existential subject among other subjects in the world; it is the subject's existence among other subjects which imbues it with meaning, and which allows for it to comport itself toward the world in various ways. Without this being-in-the-world,

being-among-others, and being-towards-death, there is no metaphysics (for Heidegger,

fundamental ontology); and without metaphysics, there is no justification for science.

Husserl, like Descartes, had proceeded from a bracketing of experience, and

naturally found himself postulating essences. It is useful for us to see how Carnap and

Heidegger differ in the critiques of Husserl.

I will define the concepts of object, science, language, and logic as both thinker see

it. We will need these definitions to work out just what they mean when they speak of

metaphysics.

Heidegger and Carnap share the same conception of an object. In Carnap:

> The word "object" is here always used in its widest sense, namely, for anything
> about which a statement can be made. Thus, among objects we count not only
> things, but also properties and classes, relations in extension and intentions, states
> and events, what is actual as well as what is not. (Carnap 2003, 5)

And in Heidegger:

> Whenever one cognizes anything or makes an assertion, whenever one comports
> oneself towards entities, even towards oneself, some use is made of "Being"; and
> this expression is held to be intelligible "without further ado", just as everyone
> understands "The sky *is* blue", "I *am* merry," and the like. (Heidegger 2008, 5)

So in both thinkers the concept of "being" or "object" is applied to both substantives

("what is actual;" "whenever one comports oneself towards entities"), and the objects of

predication ("properties and classes, [etc.]", "whenever one cognizes anything or makes

an assertion").[2]

Both authors wish to understand what *is*, in the widest sense. Both authors have

an interest in science and logic, though they take differing stances on its priority, and

both authors have an interest in understanding the way we speak about beings.

Heidegger and Carnap believe in a unified science. For Carnap, this takes the form of a

constructional system. His emphasis is on the structure of language and its relation to

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2. I take this reading from "Heidegger and the grammar of being" in Priest 2002, chap. 15

things in the world, later turning to semantics to understand how the formal syntax we use relates us to the things we observe. Carnap's project is "an attempt *to apply the theory of relations to the task of analyzing reality.*" (Carnap 2003, 7) Although he uses this phrase to characterize the project of the *Aufbau*, there is no reason to suppose his general project changed over the course of his career.

Metaphysics - How to Found the Sciences?

For Heidegger, "metaphysics" is characterized by a misuse of language, that is, it is the linguistic fallacy of speaking of Being as *a* being. Where we need to speak of the characteristic essence of beings as a whole, we are instead speaking of essential beings. For Carnap, it's quite similar. Metaphysics is the misuse of language to speak of things which cannot be structurally analyzed, that is, properly thought.

Carnap characterizes Heidegger's misuse of language in "The Elimination" as an attempt to substantiate something which cannot be substantiated. That is, Heidegger attempts to speak of "the Nothing" as if it is in fact a something, a substantial thing. However, this clearly is nonsense under the guise of first-order predicate logic. There is no way to adequately capture "the Nothing nothings" with the existential quantifier. Carnap outlines a transition from ordinary language to formal language. He characterizes the transition first by creating an object, which we call "nothing" (no). We then construct various predicates about "the nothing" by instantiating them with the pseudo-object. However, Carnap argues that what we mean by "nothing" cannot be instantiated, as it is represented by a quantifier ($\neg\exists x.Px$ for some property P). So he argues that we ought to dismiss Heidegger's talk as nonsense.

It is fairly apparent to anyone with an understanding of higher-level logics that, in fact, we *can* predicate over quantifiers. We could write "the Nothing nothings" as something like the following: $N(\neg\exists x.Px)$, and then express properties of this nothing-ing predicate as appropriate. So even on his own terms, given the advances in

logic since the article was written, Carnap's argument fails. He acknowledges as much in later writings (SOURCE), but still maintains that his interpretation of Heidegger is correct. How does he claim this?

Even if we are to predicate over nothing, this form is highly unwieldy, and does little to explain exactly what Heidegger is trying to do by substantiating nothing.

What Must Be Left Unsaid, and Saying It Anyways

Carnap and Heidegger both emphasized the importance of language to our understanding of the world. While Heidegger explicitly used poetic language to speak about what lies beyond science, Carnap believed that that which science cannot formalize should explicitly be avoided in philosophical discourse. Any extrascientific influence is akin to metaphysics: it cannot be formalized, and so should be avoided. In fact, it can be actively dangerous. Carnap worried that metaphysical language, though its claims are unverifiable, could have "psychological impacts" which could influence by an appeal to authority rather than to reason. This was not without good cause: Gogarten and Heidegger would both endorse the Nazi party. (Damböck 2022)

The logical positivists preferred to analyze the logical structure of scientific language over material analysis. This is directly reflected in the title of Carnap's first major work, *The Logical Structure of the World* .[3] In this book he would proceed from the atomic structures of our reason to construct an entire empirical worldview supposedly capable of recreating the world of science. His aim is to show the unified basis of all the sciences, that is, to show that there is only one proper science, and that the separation of the sciences into epistemologically and ontologically distinct subfields is a mistake. In line with the rest of the circle, this was to be done through conceptual reduction and reconstruction. At the time of writing, Carnap's focus was to create a single

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3. I will refer to this book as the *Aufbau*.

constructional system which would underlie the sciences. As his work matured, and by the time of his later major work, *The Logical Syntax of Language* , he would shift his view to accommodate flexibility in the choice of the formal system. He calls this the principle of tolerance. "Everyone is at liberty to build up his own logic, i.e. his own form of language, as he wishes. All that is required of him is that, if he wishes to discuss it, he must state his methods clearly, and give syntactical rules instead of philosophical arguments." (*Syntax*, §17) Nonetheless, the method of logical reduction and the autopsychological basis of scientific theory holds. This basis is directly related to Husserl's through the use of the *epoche*, or the bracketing of psychological experiences as real or unreal (see *Aufbau*, §64). Instead of proposing a realm of abstract entities alongside the conceptual connections between them, Carnap would propose only the logical structure, with the objects of that structure taken to be entirely arbitrary.

Carnap and his circle's strict adherence to their scientific aims, and their rejection of metaphysics, is directly influenced by their political goals. Carnap writes in the preface to the *Aufbau*,

> our confidence ... stems from ... the belief that [metaphysics and theology] belong to the past. We feel that there is an inner kinship between the attitude on which our philosophical work is founded and the intellectual attitude which presently manifests in entirely different walks of life. ... It is an orientation which demands clarity everywhere, but which realizes that the fabric of life can never quite be comprehended. ... Our work is carried by the faith that this attitude will win the future. (Carnap 2003, xvii–xviii)

The work of the *Aufbau* and the rest of his corpus can only be explained by a pragmatic choice, the choice to pursue the method which has so far given us the most progress in science, and which promises, according to the value theory held by the group, to provide the most equitable and prosperous conditions for mankind. His justification for the scientific worldview thus appeals to the political and social aims of the leftist movements of the 20th century.

Conclusion

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