Dilthey and Carnap: The Feeling of Life, the Scientific Worldview, and the Elimination of Metaphysics

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Introduction

In this chapter I will propose a reinterpretation of the early Vienna Circle's project of radical empiricism by reconsidering it in light of its under-appreciated Continental sources. After briefly discussing recent challenges to the standard view of logical positivism, such as its social-political context in "Red Vienna," I examine the impact of "life-philosophical" thinkers such as Nietzsche and—in particular—Dilthey on the thought of Rudolf Carnap. Dilthey's modernistic advocacy for empirical scientific inquiry and his far-reaching critique of metaphysics as reflecting a conceptually unjustifiable and indemonstrable perspective expressing a "feeling of life" and interpretively (affectively, pragmatically) articulated in a "worldview" was embraced, via Dilthey's student and Carnap's teacher Herman Nohl (1879–1960), in Carnap's pre-physicalist writings of the 1920s and the Vienna Circle's 1929 manifesto. Such

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works announced the task of overcoming metaphysics and defending the scientific life-stance (Lebenshaltung) against its authoritarian, metaphysical, and religious detractors.

The argument developed here concerns the philosophical and social-political nexus of life, science, and metaphysics in Dilthey and Carnap. Popularized or "vulgar" expressions of what came to be called Lebensphilosophie often served a reactionary role in Germanic culture in conservative cultural critics such as Ludwig Klages and Oswald Spengler. Nonetheless, concepts such as the feeling of life, life as expression and art, worldview, and life-stance were critically deployed against traditional authorities, beliefs, and institutions in order to prioritize lived and scientifically comprehended experience (Erlebnis and Erfahrung) and a more critical and experimental scientific and artistic spirit. Dilthey has been inaccurately connected at times with the "irrational" traditionalist and idealistic response against modernity and the Enlightenment. His works reveal a moderate liberal or progressive positivist dimension—one criticized by Heidegger and Gadamer²—and a proponent of the sciences, liberal modernity, and their enlightening pedagogical significance for practical life.

Carnap assimilated argumentative strategies, primarily through indirect influences such as Nohl, from Dilthey's critique of metaphysics as a discourse lacking cognitive validity, and combined positivist, logicist, and "life-philosophical" argumentative strategies to demonstrate its cognitive and conceptual senselessness. Carnap's positive references to Dilthey and his under-appreciated sensitivity to a logic of the singular and the cultural during the 1920s shed a different light on his positivist project. These interpretive elements indicate that Carnap's early thinking can be construed as a logical empiricist hermeneutics dedicated to interpreting meaning. Rather than constituting a simplistic and one-dimensional reductionism, a caricature presented by his critics, Carnap's positivist project belongs to the larger task of the pragmatic formation, cultivation, and education (Bildung) that furthers life by clarifying and elucidating it. In the conclusion, Carnap's ultimately more restrictive logical positivism is contrasted with Dilthey's unrestricted hermeneutical empiricism ("unbefangene Empirie") that embraces the empirical while rejecting doctrinal empiricism ("Empirie, nicht Empirismus").3

THE VIENNA CIRCLE'S PLURALISTIC CONTEXTS

"Positivism" signifies a shifting, diverse, and contested collection of philosophical and scientific tendencies typically concerned with the advancement of scientific inquiry and making philosophy scientific. This diversity of orientations, contexts, and arguments also applies to the logical positivism of the Vienna Circle. Its members and associates were more widely informed by and engaged in the context of early twentieth-century European thought than is characteristically acknowledged in their Anglo-American and analytic reception that tends to bracket this context as merely cultural and social-historical rather than of philosophical concern.⁴

An early example of the acultural, ahistorical, and depoliticized reception is found in the work of A.J. Ayer, which the history of early analytical philosophy is increasingly problematizing by providing a more nuanced and complex picture. After studying with the circle in Vienna, Ayer imported the Vienna Circle's radical critique of metaphysics in Language, Truth, and Logic without the pedagogical-vocational and social-political orientation with which it had been earlier associated. The standard dominant account of the Vienna Circle in the last century interprets it as primarily pursuing a synthesis of Austro-British empiricism and the new formal logic while (properly or improperly) ignoring issues of culture, history, and politics as well as engagement with other varieties of philosophical discourse.

This narrative was already normative in "continental philosophy"—whose major figures from Heidegger to Gadamer and Habermas were hostile to empiricism—and it became the dominant one within "analytic philosophy" due to the influence of Kuhn and the inspiration of the later Wittgenstein and Quine. Yet this decontextualized history, with which many philosophy of science courses continue to begin, is problematic. The Vienna Circle's logical positivism developed in a context dominated by the waning of neo-Kantianism and the emergence of new philosophical movements from Husserl's phenomenology to the critical theory of the Frankfurt School. Scholars of early analytic philosophy, such as Michael Friedman, Gottfried Gabriel, and Thomas Uebel, have pursued this contextualization further by reconsidering the sources, writings, and import of the Vienna Circle, revealing how the differences within the Circle and the philosophical and social contexts of these figures are more multifaceted.

The standard view did not develop in Vienna but retrospectively in the UK and USA of the early Cold War period. After the rise of National Socialism, the murder of Schlick, and exile, Carnap and others found themselves in American exile. Under the scrutiny of the FBI and anticommunist intellectuals such as the prominent pragmatist Sidney Hook, they were compelled to de-emphasize the cultural, pedagogical, and political aspects that crucially defined their earlier project. 6 Multiple figures associated with the Vienna Circle (including Carnap, Herbert Feigl, Philipp Frank, Hans Hahn, Otto Neurath, and Edgar Zilsel) were involved in or supported democratic socialist political and pedagogical activities. Even its politically more moderate "right-wing" (Moritz Schlick, Friedrich Waismann) was more cautious yet still politically progressive in its orientation.⁷ These social-political interests, and the solidarity they perceived with progressive cultural movements in modernistic atonal music, Bauhaus architecture, and die neue Sachlichkeit, are decisive elements not only to understanding the context and culture of the Vienna Circle but its philosophical program and especially its polemical character.8

More surprisingly, and the issue that will be at stake in this chapter, is the appearance of unexpected formative figures in the early history of the Vienna Circle such as Nietzsche, Husserl, Hans Driesch, and Dilthey. The "life-philosophers" Dilthey and Nietzsche are unexpected sources for the early Vienna Circle insofar as they were associated by scientistic and leftist detractors with the separation of the human and natural sciences (Dilthey), the prioritizing of the aesthetic and the psychological, and an irrational and perhaps vitalistic Lebensphilosophie. This historical association is no doubt mysterious as long as their thought is erroneously reduced to an anti-Enlightenment "life-philosophy" that the early Vienna Circle opposed. It is not as unexpected if we consider how both figures advocated broadening and intensifying scientific inquiry and engaged in their own extended critiques of metaphysics and religion. Nietzsche and Dilthey criticized traditional and contemporary metaphysics for its reification and forgetting of lived experience, and articulated a hermeneutical experimentalism or empiricism in determining scientific inquiry's interpretive character.

Nietzsche is the one "metaphysician" who Carnap is willing to praise as nearest to science and art without metaphysics. Philipp Frank maintained that Nietzsche and Mach shared the same spirit of radical Enlightenment and were the joint point of departure for genuinely (i.e. radically anti-metaphysical) positivistic thought. Dilthey appears less openly as an implicit source for a number of Carnap's terms and argumentative strategies. There are, nonetheless, passages that evoke in particular Dilthey's thought in Carnap's *The Logical Formation of the World (Der logische Aufbau der Welt*, 1928), his critique of metaphysics and Heidegger in "Eliminating Metaphysics through the Logical Analysis of Language" ("Überwindung der Metaphysik durch logische Analyse der Sprache," 1931), and—the less appreciated yet significant text for drawing out this critique's implications—"Theoretical Questions and Practical Decisions" ("Theoretische Fragen und praktische Entscheidungen," 1933–1934).¹¹

Dilthey's critical hermeneutics of historical life is significant for the Vienna Circle's development, since Carnap and others did not exclusively articulate an internal account of logic and the sciences, as it might appear retrospectively. As the complete name adopted in the 1929 manifesto "Vienna Circle of the Scientific World-Conception" (Weltauffassung) indicates, Neurath, Hahn, and Carnap promoted the broader cultural and educational legitimation of the scientific worldview (Weltanschauung) or, as Carnap and Neurath designated it to distinguish it from the popularized vulgar notion of worldview, "world-conception" (Weltauffassung). The character of this scientific world-conception was itself a matter of dispute, since it could mean either the extra- or non-scientific defense of science in practical life (Carnap in the 1920s) or the expression of the unity of science as a system (Neurath and later logical positivism). ¹³

In particular, the Circle's "left-wing" presented the Circle's activities as a living exemplar of a more cooperative (socialistic), open, and rational approach to the world, just as they interpreted themselves as being in solidarity with the progressive, artistic, educational, and social-political movements of the time as noted in the first preface to Carnap's *Aufbau* and the Vienna Circle's manifesto. ¹⁴ In the life-philosophical and affirmative conclusion to the program of the *Verein Ernst Mach*, published in 1929 by Carnap, Hahn, and Neurath, and dedicated to Schlick in honor of his remaining in Vienna: "The scientific world-view serves life, and life receives it." ¹⁵ Two years later, Neurath still depicted the unity of science—the ultimate form of reductive scientism for its adversaries—in life-philosophical terms as the work of a "generation," and a tool of successful prediction and hence of "life." ¹⁶

THE PROBLEM OF LIFE FROM DILTHEY TO CARNAP

Life-philosophical references and terminology are evident in the works of Carnap, Neurath, and Schlick. All three adopt to an extent the language of Dilthey's "life-philosophy," employing words such as life-stance (*Lebenshaltung*), life-intensification (*Lebenssteigerung*), life-formation (*Lebensgestaltung*), worldview, world-stance, world-conception, and lived-experience (*Erleben*) as distinct from *Erfahrung* and *Erkenntnis*, reliving (*nacherleben*), and "feeling of life" (*Lebensgefühl*). ¹⁷ Carnap introduced in 1921 in a similar vein that evokes Dilthey the dichotomy between the cognitive and non-cognitive in the language of lifephilosophy, stating that "the intuitive feeling of life as a totality (*Lebensgefühl*)" cannot be conceptually determined. ¹⁸

A number of expressions related to "life" were in common usage in ordinary central European thought by the 1920s. Words and phrases from—to use the categorization developed by Max Scheler—the so-called *Lebensphilosophie* of Bergson, Dilthey, Nietzsche, and Simmel were often popularized in the service of conservative and reactionary cultural critique (*Kulturkritik*). ¹⁹ Although popular *Lebensphilosophie* could have this reactionary and anti-intellectual role in Germanic culture in these vulgarized forms, such as Spengler's *Decline of the West* and the biologistic vitalism that fed into National Socialism, at least three "founding figures" (Bergson, Dilthey, and Simmel) were modernistic liberal (if not politically radical) thinkers as regards culture, education, and politics.

If at first glance the connection between Dilthey and the Vienna Circle seems indirect and obscure, a more systematic study of the works of Schlick, Neurath, and Carnap show a familiarity with Diltheyian concepts and arguments. This is the case with Schlick, who explored issues of the "sense of life" and ethical life-wisdom in relation to Nietzsche and Dilthey. Schlick credits Dilthey with the distinction between theoretical scientific knowledge and practical life involving feeling and expression grounded in a feeling of reality (Wirklichkeitsgefühl). Although Dilthey never separated theoretical science and practical life as radically as the Vienna Circle, he is a significant source for their emotivism: namely, the thorough separation between knowledge (Erkennen) consisting of cognitive propositions and the non-conceptual expression (Ausdruck) of lived-experience (Erleben) and feeling (Gefühl) that lacks cognitive validity.

The early Carnap was acquainted with Dilthey's thought; apparently not directly through the study of many of Dilthey's works, but most

likely orally transmitted through his teacher Nohl. As Gottfried Gabriel describes, Carnap adopted concepts and strategies from Dilthey, redeploying them from his bracketing of metaphysics in the 1920s to his more radical confrontation with metaphysics and Heidegger's ontology in the early 1930s.²³ This adaptation is significant for revealing the broader contexts, concerns, and stakes of Carnap's early thought, which is more philosophically nuanced and historically informed than commonly imagined by advocates and detractors.

To engage the question of why Dilthey might be significant for Carnap, it is helpful to distinguish Dilthey's thought from "intuitionism," "irrationalism," and the Romantic and vitalistic reaction against the Enlightenment with which *Lebensphilosophie* was later popularly associated. Dilthey's thought has two primarily methodological axes, the empirical and the interpretive. In addition to empirical research, he argued for an interpretive—via symbolic mediations and social objectifications—expression and articulation of life in art, science, and self-narratives such as autobiography. Dilthey rejected, as already involving language and history, the intuition of spirit or life found in German idealism, Husserl's phenomenology, or Bergson's life-philosophy. 25

Georg Misch, Dilthey's student, wrote his dissertation on the development of French positivism (1900–1901).²⁶ Misch described in 1947 how Dilthey's position constituted a "positivism of life" in contrast with phenomenology and logical positivism.²⁷ Dilthey's vision of a non-reductive, pluralistic, and hermeneutical positivism aimed at a "non-prejudicial and uncoerced empirical inquiry" ("unbefangene Empirie"), in order to embrace the empiria without the truncation of empiricist dogmas ("Empirie, nicht Empirismus"), contrasts with the more eliminative and restrictive interpretations of experience unfolded in classical empiricism and positivism.²⁸ In his elucidation of the typology of worldviews, Dilthey interpreted the positivism of his epoch as a contemporary manifestation of one of the three basic varieties of worldview, naturalism, which has its own legitimacy and scope as an expression of life and way of understanding reality.²⁹

It is evident from Dilthey's works as well as his critics—Heidegger and Gadamer who criticize Dilthey for being a modernistic, positivistic, and "scientistic" epistemological thinker lacking the perspective of ontology³⁰—that Dilthey advocated scientific inquiry, liberal modernity, the Enlightenment, and their educational importance. He did this in a historically aware form under the altered intellectual and social-political

conditions of the late nineteenth and early twentieth century. Dilthey is habitually described in philosophy textbooks as maintaining a drastic separation between the natural and human sciences. This distinction was not ontological or metaphysical but methodological. But even as Dilthey methodologically distinguished the natural and human sciences, as each science has its own objects and ways of approaching them, his new philosophy of the human sciences presupposed a disenchanted and naturalized world as disclosed in natural scientific inquiry and reflection.³¹ Dilthey's distinction was not primarily an ontological or metaphysical one between two distinctive realms of being; it is rather a methodological one deployed in order to interpret appropriately the unique reproductive, reflexive, and reflective structures and processes of the social-historical world.

Informed by his historical transformation of Kant's critique of metaphysics, Dilthey opposed traditional and contemporary metaphysics as self-deception. Instead of providing truth, historical analysis demonstrates an indemonstrable attitude rooted in and expressing a "feeling of life" that is articulated as a "worldview" and "lifestance." A number of figures-including Hans Haeberli, Arne Næss, and Günther Patzignoted in the 1950s and 1960s the resonances between Dilthey's and Carnap's thinking.³² When Carnap was queried in the late 1960s about his relation to Dilthey, he expressed surprise at these connections. He even denied at this late point having read Dilthey's works, despite the multiple citations of him and use of his language in his works during the 1920s.³³ There are citations of Dilthey in the Aufbau and "Eliminating Metaphysics through the Logical Analysis of Language" that indicate a familiarity with his arguments and ideas. In Jena, Carnap studied with and was good friends with Nohl, a student of Dilthey's known for his writings on Nietzsche and promotion of pedagogical reform. In this stormy period of war and revolution, Nohl and Carnap belonged to the progressive socialist oriented side of the Wandervögel, a movement of younger Germans advocating a return to a more simple primitive way of life and extended sojourns wandering in natural environments.³⁴

Carnap repeatedly evoked feeling and a feeling of life in the 1920s, and these play an important role even in the collective statement of the Vienna Circle's shared project. It is not merely the metaphysicians and irrationalists who feel and have needs, Carnap remarked:

We too, have "emotional needs" [*Bedürfnisse des Gemüts*] in philosophy, but they are filled by clarity of concepts, precision of methods, responsible theses, achievement through cooperation in which each individual plays his part.³⁵

Carnap speaks in passages such as this of Gemüt and Gesinnung; of affective dispositions oriented towards clarity and lucidity. Nonetheless—as with Dilthey's emphasis on both rationality and its limits in relation to the affective and contextual character of life—this articulation of the emotional and affective basis of practical life does not negate the reality that the generative nexus of life can never quite be comprehended: "die nie ganz durchschaubare Verflechtung des Lebens."36 As in Dilthey's writings, and unlike the endorsement of "the mystical" in Wittgenstein's Tractatus, Carnap refuses to identify the ineffability and mystery of that which appears immanently within the structured and open life-nexus, as practical problems of meaning and interpretation, with the transcendence that surpasses and steps beyond that life and the world. The question of the world cannot be sensibly answered in the world for Wittgenstein. Carnap's reading of the *Tractatus* rejects its ostensible advocacy of "the mystical" by interpreting questions of the meaning of the whole and the world as practical issues of life.³⁷

DILTHEY, CARNAP, AND THE QUESTION OF EMPIRICISM

The title of Carnap's *The Logical Formation of the World* (1928) appears to play off the title of Dilthey's last major work *The Formation of the Historical World in the Human Sciences* (1910). One work appears to be about the logical constitution of one aspect of the world to the next, and the other the self-interpretive practices of historically conditioned individuals and groups. Although at opposite extremes at the level of theory, there is a practical family relation between these two works. In the case of the early Vienna Circle, most evidently in Neurath but also in Carnap, there is a pedagogical enlightening task to his epistemic-logical project. There is a basic orientation (*Grundeinstellung*) and life-feeling that resonates with contemporary movements of life that are responding to the questions of life. It is a thesis of Dilthey, also deployed by Heidegger in his early "hermeneutics of factical life," that life responds to and articulates itself. This thesis is not vague if it is understood to be a claim about immanence, self-reflexivity, and self-reflection. This latter

dimension is lost in Carnap, as it is later in Heidegger as well, although it lingers in the hermeneutical and practical dimensions of his thought.

Carnap's "external" pragmatic justification of the place of the sciences in life in the 1920s occurs in this hermeneutical and practical context. This justification would be contradictory if the positivist ideal of science consisted purely of conclusions and theories that are required to be only cognitively valid and consequently value neutral even about science itself. Yet, significantly, the latter dimension of objectivity and neutrality belongs to Carnap's portrait of the "internal" conceptual character of the sciences. The "external" non-scientific practical justification of scientific and logical languages remains a hermeneutical-interpretive, affective-dispositional, or pragmatic concern and decision for Carnap. The decision for science can inform and orient practical life even as it is not itself a scientific claim. While the results of scientific inquiry are to be value free through rigorous examination and re-examination without requiring commitment to one theory or ideology, which is the very power of science in contrast with religion and metaphysics, science itself is not value-neutral in the context of life. Carnap's pragmatic justification of science would become stronger in later works such as Meaning and Necessity and make him a precursor to the post-positivist arguments of Thomas Kuhn and Paul Feverabend.³⁹

Scientific inquiry is itself based in and oriented by a feeling of life, an affective-practical disposition, and life-stance. This life-stance is expressed and cultivated in virtues such as clarity, coherence, simplicity with fecundity, and sobriety, and it proceeds through experimentalism and explanatory hypotheses open to revision. The significance of value-neutral scientific inquiry is then an educational and progressive one in relation to life akin to movements in other realms of life mentioned by Carnap—and discussed more thoroughly by Neurath—such as art (new objectivity), architecture (Bauhaus), music (atonal), education (school reform), social life (the labor movement), and politics (social democracy and anti-fascism).

The reductive program of Carnap's *Aufbau* is misconstrued if its mode of explication of meaning in the context of education is neglected. Carnap did not eliminate "reduced" objects such as those of the social-cultural domain and the individual; they are maintained through an elucidation of meaning in relation to more primitive elements and contexts. In Sect. 12 of the *Aufbau*, Carnap argues that structural relational descriptions would also address the question of a "logic of the

individual" seen in Dilthey and neo-Kantianism. While the English translation adopted the neo-Kantian expression "cultural sciences," the German term Carnap used was *Geisteswissenschaften* (human sciences) closely associated with Dilthey and his students.⁴⁰

The affinities between Carnap and Dilthey were criticized by his colleague Neurath. Carnap described in his diaries from 1928–1929 how Neurath condemned the "idealism" of his account of the *Geisteswissenschaften* in the *Aufbau* with reference to Dilthey. Carnap maintained a Dilthey-influenced conception of the human sciences and explicitly identified psychology, as a science of individuals, as a human science in the *Aufbau*. Dilthey's position was controversial as it was opposed by the positivist and neo-Kantian classification of psychology as a natural science. Further, in Sect. 23, Carnap concludes that "since Dilthey" the objects of the human sciences have their own autonomy and their own methodological and object-theoretical uniqueness. The constitution or reduction system leads classes of statements back to their experiential basis without eliminating their autonomy and uniqueness.

Here we can confront the myth of the hyper-reductionistic nature of Carnap's project. Carnap's reduction system does not imply, as Merleau-Ponty and the prevailing tendencies of subsequent "Continental philosophy" contend, that propositional classes are undifferentiated or that their significance is lost in elemental sensations. It is instructive that Merleau-Ponty's critique of logical positivism—to take one example determinant for later Continental thought—would not recognize Carnap's early reliance on gestalt psychology and meaning-holism, instead associating the Vienna Circle's "reductionism" with a reduction to bare atomistic sensual elements. It is revealing that Merleau-Ponty contrasted the direct access of consciousness to itself in Husserl's phenomenology with the indirect access proceeding through linguistic and logical mediation in logical positivism. Merleau-Ponty thus intimated the hermeneutical character of meaning in the Vienna Circle and opposes it through an appeal to a direct intuitive bodily self-access. ⁴³

Carnap's positive references to Dilthey as well as his sensitivity to a logic of the singular and the cultural during this period indicate the possibility of articulating his project as a logical empiricist hermeneutics rather than the naive reductionism of his analytic and Continental critics. Without metaphysical certainties or foundations, as Dilthey and Nietzsche already argued, thought is inherently hermeneutical as there are no facts or data independent of interpretive processes. It is impossible

to eliminate the hermeneutical situation of a context of interpretation, even if interpretation is identified with the pragmatically justified yet fairly rigorous criteria of logical coherence, empirical verifiability, and explanatory power. This later identification distinguishes Carnap's early logical construction and reconstruction of the world from the aesthetic orientation of interpretation in Dilthey and Nietzsche.

A noteworthy aspect of Carnap's context that connects him with Dilthey and the expressive tradition in German thought is the idea of the non-cognitive emotive character of forms of expressive life. Both seek to avoid reifying the non-cognitive dimensions of human existence and turning them into irrational idols. As with Wittgenstein's proposition 6.5 in the Tractatus, "the riddle does not exist" ("Das Rätsel gibt es nicht"), Carnap maintains that there are no "riddles of life" that are conceptually or scientifically answerable questions. They are not questions with appropriate metaphysical answers; they concern life-issues that are only about practical situations:

the "riddles of life" are not questions, but are practical situations. The "riddle of death" consists in the shock through the death of a fellow man or in the fear of one's own death. It has nothing to do with questions which can be asked about death, even if some men, deceiving themselves, occasionally believe that they have formulated this riddle by pronouncing such questions.44

The riddles and questions here are practical and expressive, even existential in a non-cognitive emotive sense. They are not conceptual or theoretical questions for science or philosophy but concern how ordinary people go about life and what decisions they make. The absence and impossibility of genuine metaphysical questions points towards "the mystical" of what cannot be expressed in Wittgenstein's Tractatus; it points towards life-questions being primarily questions of practical life in Dilthey and Carnap. Metaphysical propositions, including those concerning moral and aesthetic values and norms, are not false or uncertain. They are cognitively and epistemically if not expressively senseless. 45

Carnap argued in 1934 that theoretical knowledge and science can and should inform and educate but cannot replace the duty of practical position-taking that individuals in the end must make for themselves—potentially for the worse. 46 Theory can inform yet under-determines practice; enlightenment through theory can prepare individuals for choice through education but it does not prove or replace the non-conceptual practical decision (*Entschluß*).⁴⁷ As in the *Aufbau*, practical life does not pose questions that can be theoretically resolved.⁴⁸ It is governed by pragmatic decisions that are often determined by unconscious motives and ideological forces that theory can at best expose and explain.⁴⁹

The radical critique of "superstition, theology, metaphysics, traditional morality, the capitalist exploitation of the workers, etc." has a pedagogical function of clarification and education against "distraction and mystification" (*Ablenkung und Vernebelung*). Such "narcotics" are to be excluded as theoretically senseless rather than rejected as conceptually false. Instead of producing indifference, Carnap concludes that theoretical enlightenment over the empirical sources and functions of the narcotic and "appeal, education, example" are taken up by practical life—which cannot be affectively or value neutral in relation to itself—for its own sake in how it lives and makes decisions. Practical life—for Carnap as much as Dilthey—is a conflict of views or languages, of lifepositions and expressions of the feeling of life that cannot be resolved by theoretical and scientific knowledge. The function of science, logic, and philosophy is pedagogical and the question is whether, how, and to what extent they are taken up in life.

Reflecting his commitment to an Enlightenment model of self-formation (*Bildung*) in the context of human mortality, Carnap continued to stress in his "Intellectual Autobiography" (1963) the importance of personal education, self-development, and the self-interpretation of finite mortal life in cultivating a sense of autonomy and personhood:

The main task of an individual seems to me the development of his personality and the creation of fruitful and healthy relations among human beings. This aim implies the task of co-operation in the development of society and ultimately of the whole of mankind towards a community in which every individual has the possibility of leading a satisfying life and of participating in cultural goods. The fact that everybody knows that he will eventually die, need not make his life meaningless or aimless. He himself gives meaning to his life if he sets tasks for himself, struggles to fulfill them to the best of his ability, and regards all the specific tasks of all individuals as parts of the great task of humanity, whose aim goes far beyond the limited span of each individual life.⁵¹

CARNAP'S LOGICAL AND DILTHEYIAN CRITIQUES OF HEIDEGGER

In his "Eliminating Metaphysics" essay, Carnap diagnosed Heidegger's analysis of the nothing in "What is Metaphysics?" as a confusion that substantializes the logical operation of negation by erroneously positing and reifying "nothing" as an object. Negation is the reversal of an existential proposition that cannot be interpreted as affirming existence or an existent. Negation derivatively and immanently denies the factual and logical propositions that it depends on for its significance. It has no further cognitive meaning, nor an objective referent, such as—according to Carnap—when Heidegger states: "Nothing nothings" (*das Nichts nichtet*). According to Heidegger, the verbal "nothing" (*Nichts nichtet*) is neither a thing nor a meaningless null. Nothing is the performative condition for the negativity that makes human thought and practices possible, including all positivity. For Carnap, the statement that "nothing nothings" has no actual cognitive content that can be conceptualized and validated even if it expressively evokes feelings akin to poetry.

Carnap concluded from this inquiry, and his previous analysis of more traditional metaphysical utterances in "Pseudoproblems in Philosophy" (1928), that metaphysical utterances senselessly reify logical operations such as the assertion of being and nothing. The published version retains echoes of Carnap's earlier lecture in which metaphysics was criticized through logical analysis and through a genealogical tracing of the history of words from meaningfulness to meaninglessness. Primary examples of this for Carnap are words such as soul and God as well as words such as life, existence, and being when taken as metaphysical. Their continuing power rests in their lingering earlier sense and in their affective aura. Such discourses have an ideological instead of a clarifying function. Logical analysis is not purely theoretical, as in later language analysis, as it serves an emancipatory function for scientific thinking and for life by breaking our absorption in the magic and mania of reified words. Carnap is concerned—akin to Adorno and Levinas in their more explicitly ethical-political assessments—with Heidegger's "idolatry of words."

In addition to applying formal logic to Heidegger's assertions, Sect. 7 of "Eliminating Metaphysics" suggests the depth of Carnap's debt to Dilthey. Carnap develops the argument from Dilthey that metaphysics is a transition stage lacking validity and contemporary necessity. Metaphysics is no longer myth and not yet art. The priority of art and aesthetic lived experience (*Erlebnis*), a sensibility that lingers in

Carnap's praise of music over metaphysics, contrasts with the standard understanding of Auguste Comte's paradigmatic account—which was modified to prioritize art at the end of his life—of the hierarchy of developmental stages: (1) theological (2) metaphysical, and (3) positive (scientific).⁵⁴ Metaphysical systems are, Carnap argued in accord with Dilthey's position, at best impoverished replacements for art, literature, and music in being an expression (*Ausdruck*) of the "feeling of life" (*Lebensgefühl*).⁵⁵ As Carnap notes in accord with Schopenhauer, Nietzsche, and Dilthey, music is perhaps the feeling of life's purest expression. This feeling of life is not a mystical or elemental force, however. Both Dilthey and Carnap are careful to distinguish this feeling from a metaphysical or vitalistic force that would underlie life.

Heidegger responded to Carnap indirectly by modifying his approach to the nothing, including in later additions to his criticized essay "What is Metaphysics?" and more notoriously in his lecture courses after the Vienna School's exile in 1935 in which Heidegger celebrated their exile. Heidegger linked positivism with other forms of modernity such as Russian communism, Americanism, and the technological devastation of the natural world. Heidegger identified positivism with modernistic socio-ecological developments exemplified by the collapse of the fourfold (*Geviert*): human "massification," the gods' flight, the sky's darkening, and the technological domination of nature. In contrast, Adorno and Horkheimer diagnosed positivism as symptomatic of the failed dialectic of modernity due to its failure to unfold the critical potential of rationality and claimed that logical positivism and Heideggerian ontology were two sides of one political attitude: one that resigns itself before the prevailing world-order.

BETWEEN PLURALITY AND UNITY

Notwithstanding the affinities between Carnap and Dilthey indicated in this chapter, Dilthey retained a more comprehensive interpretation of rationality as historically embodied in multiple forms of life and remained the more radically pluralistic empiricist. Dilthey would presumably, and legitimately, have extended his critique of the reductive positivism that forgets the heterogeneity of phenomena and the self-undermining of scientific inquiry in its metaphysical totalization from Comte's sociology to both Heidegger's ontology of originary Being (*Sein*) and the Vienna Circle's project of a unified science:

My attack on sociology thus cannot be directed against a discipline of this sort [i.e. the study of society], but is rather aimed at a science that seeks to comprehend in one science everything which occurs de facto within human society. Such comprehension would be based on the following principle: Whatever occurs within human society in the course of its history must be integrated into the unity of one and the same object.⁶⁰

Dilthey was a controversial philosopher for the Vienna Circle. Neurath in particular appealed to the project of a unified science in repeatedly criticizing Dilthey's differentiation of interpretive understanding (*verstehen*) and causal explanation (*erklären*) as the primary methods of the human (*Geisteswissenschaften*) and natural sciences (*Naturwissenschaften*).⁶¹ Neurath rejected such distinctive Diltheyian concepts as dualistic and as the remnants of metaphysics and theology.⁶² However, Dilthey interpreted the project of a unified totalizing science as being more indebted to metaphysics and theology than the experiential differentiation of the sciences, according to their objects and ways of accessing objects, which he encouraged.

Næss and Gabriel contend that Dilthey and Carnap's anti-metaphysical appeals to worldview and world-conception are as totalistic as the metaphysics that they reject. This argument is unconvincing insofar as feelings of life and their expressions in worldviews in Dilthey's conception are inexorably manifold and pluralistic. Their incommensurability and agonistic conflict (Widerstreit) does not allow the possibility of a final resolution into one systemic totality.⁶³ Carnap noted the plurality of feelings of life and their aesthetic expression in contrast to the sciences' conceptual unity. Carnap and Neurath justify the world-conception pragmatically in relation to life, yet both diminish the pluralistic and agonistic dynamic described by Dilthey as the conflict and contest of worldviews (Widerstreit der Weltanschauungen). 64 Dilthey's arguments for fundamental pluralism at the level of affects and concepts indicate his distance from Carnap's program of unitary science based on a heuristic physicalism. Despite his commitment to the idea of unified science, pluralism cannot be claimed to be non-existent in Carnap given his pragmatic considerations concerning meaning that culminated in the principle of tolerance unfolded from The Logical Syntax of Language (1934) to Meaning and Necessity: A Study in Semantics and Modal Logic (1947/1956).65

Even if the unity of science is understood as a totalizing project, it is not a task that Dilthey advocated. Dilthey rejected Comte's vision of a unified

science, and Neurath would repeatedly point out that Dilthey and his apparent influence on Carnap were obstacles to the idea of a unified science. 66 According to Dilthey, there are at most temporary unities of experience and thought that cannot eliminate the differences and tensions of things and of discovering and inventing the most appropriate approaches to them. Neurath upheld that the nonsensical assertion of essence or substance (i.e. essentialism) must be the source of the distinction between the human and natural sciences, and the psychological and the physical.

Dilthey argued for anti-essentialism from the opposite claim of the difference and plurality of things and human stances toward things.⁶⁷ While there is no ultimate metaphysical distinction between mind and matter or spirit and world in Dilthey's works, there are distinct and multiple comportments and ways in which humans engage in and comprehend their embodied, worldly, and immanent existence. But whether a unified totality is organized through one transcendent supernatural or immanent worldly principle, both are equally metaphysical for Dilthey. Such tendencies are expressions of a life-configuration (*Lebensgestaltung*) that overextend the principle of identity by imposing it upon the contingent plurality of the experienced world's contexts and conditions. Accordingly, whether one unitary system is understood as feeling of life or poetic expression, as affective-practical worldview or unified scientific world-conception: "one objective, determinate, *integral system* of reality that excludes other possible ones is not demonstrable."

Dilthey's "principle of phenomenality" and the early Carnap's employment of phenomenality in the *Aufbau* reflect an attention to addressing experience in its "internal" or experiential immanence, its holistic relationality, and its linguistic formation and interpretation, even as both refused to endorse phenomenalism as a metaphysical doctrine about being. This tendency in Carnap can be seen in his earlier adaptation of a quasi-phenomenological life-philosophical description of lived-experience in the proto-*Aufbau* sketch "Vom Chaos zur Wirklichkeit" ("From Chaos to Actuality") in 1922.⁶⁹ The logical constitution of reality presupposes a non-logical primary experiential world (the chaos of lived-experience) that can only be cognized through rational reconstruction.

Forsaking his earlier quasi-phenomenology, the phenomenal and methodological solipsistic autopsychological point of departure introduced in the *Aufbau* can only be methodologically and heuristically maintained according to Carnap, who would eventually abandon this

overly subjective point of departure a few years later in favor of a methodological physicalism inspired by his colleague Neurath. Carnap's diaries reveal how Neurath rejected the methodological solipsism and individualism of Carnap's *Aufbau* in favor of collectivism and materialism.⁷⁰ The methodological materialism of the 1930s need not, they argued, assume a metaphysical or ontological materialism that their elimination of metaphysics precluded. In Dilthey's case, phenomenalism—or what he described as the principle of phenomenality that indicates the co-givenness of self and worldly phenomena independent of any essence, process, or substance—is interpretive rather than metaphysical, connecting the first person perspective of "inner experience" with the immanence of the "principle of phenomenality."⁷¹

Despite the mutuality of lived-experience and interpretive language, as well as the appropriation of non-atomistic holistic gestalt psychology in the Aufbau that would place psychology closer to Dilthey's conception of psychology as a human rather than a natural science, Carnap and Dilthey did diverge over the significance of the interpretive character of language and consequently of how to express and even what to count as experience.⁷² That is, whereas both are concerned with interpretation and explication, interpretation is construed as either primarily linguistic, as understood through the model of modern formal logic in Carnap, or as consisting of the full array of questions and strategies associated with hermeneutics and the lived life-nexus (Lebenszusammenhang) in Dilthey. Whereas Dilthey carefully portrayed how the life-nexus has its own structures and rationality, a theme later taken up by Husserl and Habermas, Carnap abandoned the rationality of the life-world to an affective realm that could only be inspired and reformed by the model of rationality evident in the sciences. Rationality is increasingly identified exclusively with science and logic in logical positivism, which undercuts the pragmatic enlightening function that was emphasized in the 1920s' program of a scientific world-conception.

In "Theoretical Questions and Practical Decisions," Carnap starkly distinguishes cognitive sense and theoretical science from the non-cognitive and practical. Carnap's account of the latter is in danger of lapsing into the irrational and eliminating the critical role of reason in aesthetic, ethical, and political reflection. Dilthey's works suggest a more liberal and tolerant conception of historically embodied reason, as he traced the differences, tensions, and the continuities between non- or minimally cognitive expression and theoretical cognition and knowledge. This is

evident in their usage of the term *Aufbau* (formation or construction), a key term for Dilthey and Carnap. It principally signifies historical formation of the multiplicity, range, and richness of human experiences in Dilthey, and logical construction in Carnap. The plural character of historicity and temporality entails the necessity of experientially and experimentally engaging with the world. This open and pluralistic empiricism is not only found in Dilthey. Kuno Fischer distinguished *empiria* as the experiential fullness and manifoldness of life from empiricism, which posits experience as a basic epistemic principle and hence is experientially impoverished.⁷³

Conclusion

As argued in this chapter, the early Carnap construed the critique of metaphysics as a crucial part of legitimating and ideologically and polemically defending the scientific life-stance (*Lebenshaltung*) against its critics. Dilthey's critical assessment of traditional and contemporary metaphysics included what he considered to be the implicitly metaphysical character of Comte's positivism as well as nineteenth-century materialism. Dilthevian suspicions and fears of latent metaphysics led Carnap and Neurath to posit a methodological rather than ontological materialism as the basis of scientific inquiry. Dilthey's analysis of metaphysical systems as expressions and articulations of a "feeling of life" (Lebensgefühl) in a worldview (Weltanschauung), which are more akin to works of art and poetry than cognitively oriented logic or science, shaped the anti-metaphysical strategies expressed by Carnap in the 1920s and that culminated in his critique of Heidegger's ontology of being and nothing. Heidegger shared this tendency with Dilthey and Carnap to the extent that he interpreted his own ontology as overcoming traditional metaphysics and its "forgetfulness of being." Heidegger's way of overcoming metaphysics appeared to Carnap as its reaffirmation in an existential-ontological disguise, and a way of thinking with problematic political associations.⁷⁴

Carnap and Heidegger increasingly abandoned the Diltheyian dimensions of their early thinking. Heidegger shifted away from his earlier hermeneutics of factical life, a model influenced by Dilthey and closer to the sciences and empirical life than his later thinking, while Carnap turned toward a pragmatic-semantic account of language and physicalist interpretation of the sciences that was no longer explicitly conceived as part of a broader practical program of enlightenment and education. Unlike

its earlier social-critical formulation, the elimination of metaphysics appeared more dogmatic, exclusionary, and restrictive than critical and demystifying for later philosophers.

Carnap's cultural and political commitments cannot be cleanly separated from his scientific and logical works. His early philosophy of science and hermeneutics of explication are integral parts of a wider project of formation, cultivation, and education (*Bildung*) that furthers life through clarifying it. Scientific inquiry and education are interconnected with critical reflection and accordingly at least indirectly with social transformation. Carnap's early project can be interpreted as a deeply social-political project formulated in a language affirming value-neutrality and objectivity as primary characteristics of the scientific stance that should inform and reorient social-political life. This value-neutral discourse was therefore itself interpreted as political, modernistic, and socialistic by right-wing opponents of the Vienna Circle and by its philosophically anti-foundationalist, life-expressive, non-cognitivist, and socially progressive "left-wing": Carnap, Neurath, Hahn, and Frank.⁷⁵

Notes

- 1. On the significance of the "feeling of life" in Dilthey, see Rudolf A. Makkreel (1985) "The Feeling of Life: Some Kantian Sources of Life-Philosophy," in Frithjof Rodi and Otto F. Bollnow (eds) Dilthey-Jahrbuch für Philosophie und Geschichte der Geisteswissenschaften 3 (Göttingen: Vandenhoeck & Ruprecht), 83–104; and Eric S. Nelson (2014) "Language, Psychology, and the Feeling of Life in Kant and Dilthey," in Frank Schalow and Richard L. Velkley (eds) The Linguistic Dimension of Kant's Thought: Historical and Critical Essays (Evanston: Northwestern University Press), 263–287.
- 2. Hans-Georg Gadamer (1985) "Wilhelm Dilthey nach 150 Jahren: Zwischen Romantik und Positivismus," in Ernst W. Orth (ed.) Dilthey und die Philosophie der Gegenwart (München: Verlag Karl Alber), 157–182; and (1995) Hermeneutik in Rückblick (Tübingen: Mohr Siebeck), 9 and 186. On Heidegger's reception of Dilthey, see Eric S. Nelson (2016) "Heidegger and Dilthey: A Difference in Interpretation," in François Raffoul and Eric S. Nelson (eds) Bloomsbury Companion to Heidegger (London: Bloomsbury Press), 129–134; Eric S. Nelson (2015) "Heidegger and Dilthey: Language, History, and Hermeneutics," in Hans Pedersen and Megan Altman (eds) Horizons of Authenticity in

- Phenomenology, Existentialism, and Moral Psychology (Dordrecht: Springer Netherlands), 109–128.
- 3. See my discussion of the priority of the empirical and experiential in Dilthey in Eric. S. Nelson (2008) "Interpreting Practice: Epistemology, Hermeneutics, and Historical Life in Dilthey," *Idealistic Studies* 38, 1, 2, 105–122.
- 4. Michael Friedman (2000) A Parting of the Ways: Carnap, Cassirer, and Heidegger (Chicago: Open Court), 15; Gottfried Gabriel (2004) "Introduction: Carnap Brought Home," Steve Awodey and Carsten Klein (eds) Carnap Brought Home: The View from Jena (Chicago: Open Court), 3–20.
- Alfred J. Ayer (1952) Language, Truth, and Logic (New York: Dover Publications). Ayer further helped codify what came to be the "standard view" with his anthology (1959) Logical Positivism (Glencoe: Free Press).
- 6. See George A. Reisch (2005) How the Cold War Transformed Philosophy of Science: To the Icy Slopes of Logic (Cambridge: Cambridge University Press); John McCumber (2001) Time in the Ditch: American Philosophy and the McCarthy Era (Evanston: Northwestern University Press).
- 7. See Andrew Bowie (2003) Introduction to German Philosophy: From Kant to Habermas (Cambridge: Polity), 167; Hans-Joachim Dahms (1994) Postivismusstreit (Frankfurt: Suhrkamp), 38–39; Friedman, A Parting of the Ways, 16–18.
- 8. Despite these political activities and sensibilities, skepticism continues about the philosophical importance of this social-political context; see Sarah S. Richardson (2009) "The Left Vienna Circle, Part 1. Carnap, Neurath, and the Left Vienna Circle Thesis," Studies in History and Philosophy of Science Part A 40, 1, 14–24.
- 9. See Aldo Venturelli (1984) "Nietzsche in der Berggasse 19. Über die erste Nietzsche-Rezeption in Wien in Internationales Nietzsche-Seminar (Berlin, 1982)," Nietzsche-Studien 13, 448–480; William J. MacGrath (1974) Dionysian Art and Populist Politics in Austria (New Haven: Yale University Press).
- 10. Rudolf Carnap (2004) "Überwindung der Metaphysik durch logische Analyse der Sprache," in Thomas Mormann (ed.) Scheinprobleme in der Philosophie und andere metaphysikkritische Schriften (Hamburg: Meiner), 81–109, 107; Philipp Frank (2006) "Die Bedeutung der physikalischen Erkenntnistheorie Machs für das Geistesleben der Gegenwart," in Michael Stöltzner (ed.) Wiener Kreis: Texte zur wissenschaftlichen Weltauffassung (Hamburg: Meiner), 111–113. On his continuing interest in Nietzsche, as a critic of metaphysics and advocate of the sciences, note Philipp Frank (1941) Between Physics and Philosophy (Cambridge: Harvard University Press), 51–53; id. (1949) Modern Science and Its

- Philosophy (New York: G. Braziller), 75-77; id. (1998) The Law of Causality and Its Limits (Dordrecht: Kluwer Academic Publishers), 265-266.
- 11. Rudolf Carnap (1998) Der logische Aufbau der Welt (Hamburg: Meiner); id. (2004) "Überwindung der Metaphysik," 81-109; id. (1934) "Theoretische Fragen und praktische Entscheidungen," Natur und Geist 2, 257–260; and republished (1975) in Hubert Schleichert (ed.) Logischer Empirismus - Der Wiener Kreis: Ausgewählte Texte mit einer Einleitung (München: Wilhelm Fink), 173-176.
- 12. On notions of world, world-view, and world-conception in Dilthey and related figures, see Eric S. Nelson (2015) "Life and World," in Jeff Malpas and Hans-Helmuth Gander (eds) Routledge Companion to Philosophical Hermeneutics (London: Routledge), 378-389.
- 13. See, for example, Otto Neurath (2006 [1931]) "Soziologie im Physikalismus," in Stöltzner (ed.), Wiener Kreis: Texte zur wissenschaftlichen Weltauffassung, 269-271.
- 14. Carnap, Der logische Aufbau der Welt; Verein Ernst Mach (2006 [1929]) "Wissenschaftliche Weltauffassung. Der Wiener Kreis," in Stöltzner (ed.), Wiener Kreis: Texte zur wissenschaftlichen Weltauffassung, 3-29.
- 15. Verein Ernst Mach (2006 [1929]) "Wissenschaftliche Weltauffassung," 27.
- 16. Neurath, "Soziologie im Physikalismus," 270 and 275.
- 17. For a discussion of Carnap's early uses of Lebensgefühl, for example, see André W. Carus (2007) Carnap and Twentieth-Century Thought: Explication as Enlightenment (Cambridge: Cambridge University Press), 123 and 140.
- 18. Quoted in Carus, Carnap and Twentieth-Century Thought, 140. Rudolf Carnap (1921) "Analyse des Weltbildes," April, unpublished MS, RC-081-05-06.
- 19. Max Scheler (1972) "Versuche einer Philosophie des Lebens. Nietzsche-Dilthey-Bergson," in Max Scheler, Gesammelte Werke, vol. 3 (Bern: Francke), 311–339.
- 20. Moritz Schlick (2006) Lebensweisheit. Versuch einer Glückseligkeitslehre und Fragen der Ethik, Gesamtausgabe Abt. I, vol. 3 (Wien: Springer).
- 21. Moritz Schlick (2009) Allgemeine Erkenntnislehre, Gesamtausgabe Abt. I, vol. 1 (Wien: Springer), 446.
- 22. In contrast with his previous work cited above, Schlick radicalized this distinction in the Vienna school period; for example, in Moritz Schlick (2006 [1926]), "Erleben, Erkennen, Metaphysik," in Stöltzner (ed.), Wiener Kreis: Texte zur wissenschaftlichen Weltauffassung, 174. On Carnap's emotivism and "life-philosophy," compare Thomas Mormann (2007) "Carnap's Logical Empiricism, Values, and American Pragmatism,"

- *Journal for General Philosophy of Science* 38, 1, 127–146. On the practical orientation of practice in Dilthey, see Nelson, "Interpreting Practice," 105–122.
- 23. Gabriel, "Introduction: Carnap Brought Home," 3–20.
- 24. Another context for the understanding of positivism in both thinkers is the "Leipziger 'Positivisten-Kränzchen,'" with which, through Wilhelm Wundt, Dilthey came into conflict over the question whether psychology is primarily a natural or human science. On Leipzig positivism, compare Erich Rothacker (1920) *Einleitung in die Geisteswissenschaften* (Tübingen: J.C.B. Mohr [Paul Siebeck]), 199.
- 25. See Eric S. Nelson (2007) "Empiricism, Facticity, and the Immanence of Life in Dilthey," *Pli: Warwick Journal of Philosophy* 18, 108–128.
- 26. Georg Misch (1969) Zur Entstehung des französischen Positivismus (Darmstadt: Wissenschaftliche Buchgesellschaft).
- 27. Georg Misch (1947) Vom Lebens- und Gedankenkreis Wilhelm Diltheys (Frankfurt am Main: Verlag G. Schulte-Bulmke), 14.
- 28. These expressions occur respectively in Wilhelm Dilthey, GS 1: 81 and GS 19: 1; Note R. Makkreel's analysis of Dilthey's empirical orientation in his introduction to SW I: 8. In the remainder of this chapter the following abbreviations for Dilthey's works are used: GS = Wilhelm Dilthey, Gesammelte Schriften, vols 1-26 (1914-2006) (Göttingen: Vandenhoeck & Ruprecht, current Publisher): GS 1 (1959) Einleitung in die Geisteswissenschaften: Versuch einer Grundlegung für das Studium der Gesellschaft und der Geschichte, ed. B. Groethuysen, 4th edn; GS 2 (1957) Weltanschauung und Analyse des Menschen seit Renaissance und Reformation, ed. G. Misch, 5th edn; GS 8 (1960) Weltanschauungslehre: Abhandlungen zur Philosophie der Philosophie, ed. B. Groethuysen, 2nd edn; GS 19 (1997) Grundlegung der Wissenschaften vom Menschen, der Gesellschaft und der Geschichte, ed. H. Johach and F. Rodi, 2nd edn; GS 23 (2000) Allgemeine Geschichte der Philosophie. Vorlesungen 1900–1905, ed. G. Gebhardt and H.-U. Lessing; SW I = Wilhelm Dilthey, Selected Works, vol. 1, Introduction to the Human Sciences, ed. R. Makkreel and F. Rodi (Princeton: Princeton University Press, 1989).
- 29. Compare Dilthey's statements on naturalism and positivism in GS 2: 312; GS 8: 152, 244; GS 23: 146. On Dilthey's attitude towards naturalism, see Eric S. Nelson (2013) "Between Nature and Spirit: Naturalism and Anti-Naturalism in Dilthey," in G. D'Anna, H. Johach, and E.S. Nelson (eds) Anthropologie und Geschichte. Studien zu Wilhelm Dilthey aus Anlass seines 100. Todestages (Würzburg: Königshausen & Neumann), 141–160.
- 30. Hans-Georg Gadamer, *Hermeneutik im Rückblick* (Tübingen: Mohr-Siebeck 1995), 9, 176–177, 186, 394; id., *Neuere Philosophie II* (Tübingen: Mohr-Siebeck 1995), 406–409.

- 31. On Dilthey's account of naturalization, see Nelson, "Between Nature and Spirit: Naturalism and Anti-Naturalism in Dilthey," 141-160.
- 32. Gabriel, "Introduction: Carnap Brought Home," 5 and 17; Hans Haeberli (1955) Der Begriff der Wissenschaft im logischen Positivismus (Bern: P. Haupt), 109.
- 33. Gabriel, "Introduction: Carnap Brought Home," 17.
- 34. On its influence of the German youth movement on the young Carnap, see Carus, Carnap and Twentieth-Century Thought: Explication as Enlightenment, 3.
- 35. Carnap, Der logische Aufbau der Welt, xv.
- 36. Carnap, Der logische Aufbau der Welt, xvi.
- 37. On his relationship with Wittgenstein and difference over the mystical, see Rudolf Carnap (1963) "Intellectual Autobiography," in Paul Arthur Schilpp (ed.) The Philosophy of Rudolf Carnap (La Salle: Open Court), 26-27.
- 38. Thomas Uebel (2004) "Education, Enlightenment and Positivism: The Vienna Circle's Scientific World-Conception Revisited," Science and Education 13, 1-2, 41-66.
- 39. Rudolf Carnap (1956) Meaning and Necessity: A Study in Semantics and Modal Logic, 2nd edn (Chicago: University of Chicago Press).
- 40. On the difference between the Kulturwissenschaften and the Geisteswissenschaften, see Rudolf A. Makkreel (1969) "Wilhelm Dilthey and the Neo-Kantians: The distinction of the Geisteswissenschaften and the Kulturwissenschaften," Journal of the History of Philosophy 7, 4, 423-440.
- 41. Rudolf Carnap, Tagebücher 1908 bis 1935, 45: 12-1928 bis 12-1929, Do 19. Archives of Scientific Philosophy, University of Pittsburgh, Carnap Papers. RC-XX-XX. Manuscript transcribed by Brigitta Arden and Brigitte Parakenings.
- 42. Maurice Merleau-Ponty (2002) The Phenomenology of Perception (London: Routledge), xvi, 27.
- 43. Merleau-Ponty, The Phenomenology of Perception, xvi-xvii.
- 44. Ludwig Wittgenstein (1984) Logisch-philosophische Abhandlung, in Werkausgabe, vol. 1 (Frankfurt: Suhrkamp), 84, 6.5: "For an answer which cannot be expressed the question too cannot be expressed. The riddle does not exist. If a question can be put at all, then it can also be answered." Carnap, Der logische Aufbau der Welt, 260-261.
- 45. Wittgenstein, 1984, 6.522; Carnap, "Überwindung der Metaphysik durch logische Analyse der Sprache," 81 and 103.
- 46. Carnap, "Theoretische Fragen und praktische Entscheidungen" (republished), 174; for a nuanced approach to the issue of theory and practice in

- the Vienna Circle, see Uebel, "Education, Enlightenment and Positivism: The Vienna Circle's Scientific World-Conception Revisited," 41–66.
- 47. Carnap, "Theoretische Fragen und praktische Entscheidungen" (republished), 174.
- 48. Ibid., 173–176; for a nuanced approach to the issue of theory and practice in the Vienna Circle, see Uebel, "Education, Enlightenment and Positivism: The Vienna Circle's Scientific World-Conception Revisited," 41–66.
- 49. Carnap, "Theoretische Fragen und praktische Entscheidungen" (republished), 176. See the argument about Kelsen in Chap. 7 of this volume.
- 50. Carnap, "Theoretische Fragen und praktische Entscheidungen" (republished), 176.
- 51. Carnap, "Intellectual Autobiography," 8–9.
- 52. Carnap, "Überwindung der Metaphysik durch logische Analyse der Sprache," 95.
- 53. Martin Heidegger (2004) Wegmarken (Frankfurt am Main: Klostermann), 116.
- 54. For the context of Comte's German reception, see Eckhardt Fuchs (2000) "English Positivism and German Historicism," in B. Stuchtey and P. Wende (eds) *British and German Historiography 1750–1950* (Oxford: Oxford University Press).
- 55. Carnap, "Überwindung der Metaphysik durch logische Analyse der Sprache," 106–107.
- 56. Martin Heidegger (1983) Einführung in die Metaphysik (Frankfurt am Main: Klostermann), 228. I further discuss Carnap's critique of Heidegger and Heidegger's assessment of Carnap in Eric S. Nelson (2016) "Heidegger and Carnap: Disagreeing about Nothing?" in Raffoul and Nelson (eds) Bloomsbury Companion to Heidegger, 151–156.
- 57. Heidegger, Einführung in die Metaphysik, 29 and 34.
- 58. Compare Dahms, *Postivismusstreit*, 94–96, and Thomas Wheatland (2009) *The Frankfurt School in Exile* (Minneapolis: University of Minnesota Press), 97–139.
- 59. On Dilthey's ontic pluralism, and Heidegger's rejection of it in favor of the unity established by the ontological difference, see Eric S. Nelson, "Heidegger and Dilthey: Language, History, and Hermeneutics," 109–128.
- 60. Dilthey, GS 19: 421/SW I: 498.
- 61. Neurath, "Soziologie im Physikalismus," 283–287; compare Thomas Uebel's (2010) discussion of Neurath and *verstehen* in "Opposition to Verstehen in Orthodox Logical Empiricism," in Uljana Feest (ed.), *Historical Perspectives on Erklären and Verstehen* (Dordrecht: Springer), 291–309.

- 62. Neurath, "Soziologie im Physikalismus," 283–287.
- 63. Paolo Parrini, Wesley C. Salmon, and Merrilee H. Salmon (eds) (2003) Logical Empiricism: Historical and Contemporary Perspectives (Pittsburgh: University of Pittsburgh Press), 40. On the metaphysical character of Dilthey's anti-metaphysics, compare H.-H. Gander (1988) Positivismus als Metaphysik: Voraussetzungen und Grundstrukturen von Diltheys Grundlegung der Geisteswissenschaften (Freiburg: Alber).
- 64. Dilthey, GS 8: 18, 98, 152.
- 65. Rudolf Carnap (2002) The Logical Syntax of Language (Chicago: Open Court), 51-52; Carnap, Meaning and Necessity: A Study in Semantics and Modal Logic.
- 66. See note 39 above.
- 67. Neurath, "Soziologie im Physikalismus," 284 and 286.
- 68. Dilthey, GS 1: 402/SW I: 235.
- 69. Rudolf Carnap (1922) "Vom Chaos zur Wirklichkeit," unpublished MS, RC-081-05-01.
- 70. Carnap, Tagebücher, 41: 01-1926 bis 12-1926, So 21.
- 71. On the principle of phenomenality, see Dilthey's "Breslauer Ausarbeitung," in Wilhelm Dilthey, GS: 19: 64–5/SW I: 251–2.
- 72. On Carnap and Gestaltpsychologie, see Harald Wasser (1995) Sinn, Erfahrung, Subjektivität: eine Untersuchung zur Evolution von Semantiken in der Systemtheorie, der Psychoanalyse und dem Szientismus (Würzburg: Königshausen & Neumann), 177–183.
- 73. Kuno Fischer (1875)Francis Baconund seine Nachfolger der Erfahrungsphilosophie Entwicklungsgeschichte (Leipzig: Brockhaus), 510.
- 74. On Heidegger's involvement with National Socialism, see Eric S. Nelson (2016) "Heidegger's Black Notebooks: National Socialism, Antisemitism, and the History of Being," in Raffoul and Nelson (eds) Bloomsbury Companion to Heidegger, 483–494.
- 75. Thomas Uebel, "Carnap, the Left Vienna Circle, and Neopositivist Antimetaphysics," in Awodey and Klein (eds) Carnap Brought Home, 248-249; on Popper's hostility, see Malachi H. Hacohen (1998) "Karl Popper, the Vienna Circle, and Red Vienna," Journal of the History of Ideas 59, 4, 711–734.