

Dilthey, Historicism, and Logical Empiricism

Christian Damböck

Institute Vienna Circle

christian.damboeck@univie.ac.at

Forthcoming in Christoph Limbeck-Lilienau and Thomas Uebel (eds.), *Routledge Handbook of Logical Empiricism*

The topic of this chapter is complex and problematic. Historicism is a current of 19th century philosophy (I will call it “objectivist historicism” or “hermeneutics”) which was heavily distorted and finally extinguished in the context of major developments of 20th century philosophy. There is one non-standard reading of this history, however, according to which a certain aspect of the 19th century original conception—which in (2017) I called “German empiricism”—survived in the context of early logical empiricism. Obviously this is a complicated story because those early logical empiricists who fit our narrative best (Rudolf Carnap and Otto Neurath) sometimes explicitly and polemically rejected hermeneutics and “Einfühlung” (empathy). It turns out, however, that what Carnap and (more importantly) Neurath criticized at the beginning of the 1930s where the then distorted varieties of the old 19th century conception, while they intended to uphold the original conception. The reason for this was simple. Objectivist 19th century hermeneutics, as developed by scholars such as August Boeckh, Moses (Moritz) Lazarus, Chajjm (Heyman) Steinthal and Wilhelm Dilthey was perfectly compatible with an empiricist world conception, whereas the then contemporary conceptions of Oswald Spengler, Martin Heidegger, Eduard Spranger, Otto Friedrich Bollnow tended to be

radically anti-empiricist, and even anti-scientific. In order to unravel these complexities I first sketch the long-term development of historicism and hermeneutics during the last two centuries. Then I focus on the cases of Carnap and Neurath. For reasons of space, I cannot take into account other logical empiricists such as Philipp Frank, Victor Kraft, Edgar Zilsel and Moritz Schlick or Hans Reichenbach, although they all also might have *some* historicist background: the case studies of Carnap and Neurath illustrate a significant pattern in any case.

Historicism and Hermeneutics

19th century German historicism is characterized, first of all, by a double rejection: the rejection of crude historical speculations such as Georg Wilhelm Friedrich Hegel's idealistic reconstruction of world history and world spirit and the rejection of Henry Thomas Buckle's positivistic attempts to explain historical developments by means of a small number of "natural laws" of history. The key aspect of what we today call "historicism" in a somewhat sympathetic spirit—in the 19th century the term was mostly used in a pejorative way: there was hardly any "historicist" who identified herself in this fashion—was that the task of history was shifted from the mere description of *spatiotemporal* facts (as it was dominant in all varieties of historiography until the 18th century) toward the level of *mental* facts. Wilhelm Dilthey identified the task of the historian to develop a "critique of historical reason" where spatiotemporal facts only serve as the historian's sources for a reconstruction of the historical changes in abstract categories and transcendental ideas. This new form of historical experience was also provocatively called "transcendental experience" by Dilthey (Damböck 2017: ch. 3). The

abstract entities historicized here comprised also sociological structures or what Lazarus and Steinthal called “Volksgeist.” Dilthey, Lazarus, and Steinthal developed their competing empirical approaches toward the mental by means either of a certain psychological method, what Dilthey called “descriptive psychology,” or of what Lazarus and Steinthal called “*Völkerpsychologie*” (see Damboeck, Feest, Kusch 2020). Dilthey’s method remained important in later developments: on the one hand, as an empirical method with the inclusion of experimental approaches – here the thought psychology of the Würzburg school around Oswald Külpe and Karl Bühler as well as the Berlin school of Gestalt psychology around Max Wertheimer, Wolfgang Köhler and Kurt Lewin could be mentioned; on the other hand, at the extreme opposite side of the epistemic spectrum, as an entirely non-empirical and non-experimental method of “*geisteswissenschaftliche Psychologie*” in the sense of the Dilthey student Spranger. The empirically minded branch of these developments was also important for Carnap’s early intellectual development and served as a conceptual background to his *Aufbau* (Feest 2007).

Historicism was partly an elaboration and partly a criticism of the age of Enlightenment. It adopted the idea that what we call “reality” is partly composed of, if not entirely constructed by means of, abstract notions in the human mind, i.e., it called on what Immanuel Kant called the “Copernican turn” of philosophy. But historicism also criticized the Kantian idea that this human reality of mental facts might be something eternally fixed and unshakable: it also meant the historicization of the mental world. The mental world, for a historicist, is *a product* of history, rather than its immutable background. In this form, historicism did not emerge earlier than 1860; previously, in the first half of the 19th century, historians did not question that history reflects either merely

external spatiotemporal events or a reservoir of eternal ideas or an eternally fixed logic of spirit, in the sense of Hegel. But scholars such as Dilthey, Steinthal, Lazarus, rejected these ideas around 1860.

We can distinguish a number of different approaches that frame the history of historicism from the middle of the 19th century up to the present. The main distinction is that between *objective* approaches, for whom the historian merely reconstructs a certain historical context, and all those approaches for whom the historian has to do significantly more. For the objectivist, different historical contexts c and c^* require different representations y and y^* . Objectivists divided over how y and y^* are differentiated. On the one hand, there were those who merely replaced the idea of an eternally fixed representation of the world with the idea of representations that change through history. Given a certain x , we obtain a certain y , where the law of transition is fixed. The role of the historian was limited to getting y right, The context c^* of the historical reconstruction remains irrelevant, only the historical context c itself matters. In sharp contrast to this *aprioricist* conception (as defended by Hermann Lotze and the Southwest-German school of Wilhelm Windelband and Heinrich Rickert), *empirically-minded* thinkers like Dilthey or Hermann Cohen were convinced that any representation y , being an abstract conceptual structure, is *a construction* that relies heavily on the respective context in which it is made. For them, y^* still can be *objective* because it is not *the preference* of the constructor or her *emotional state* that furnishes the context c^* but *the scientific perspective that is taken up* (the state of scientific knowledge plus the general scientific viewpoint as determined by the latter): y^* is *a result* of both c (the investigated context) and c^* (the context of investigation). What empirically-minded thinkers like Dilthey and

Cohen rejected was the reliance on all kinds of emotional and moral skills: the historian was neither a politician nor the founder of a *Weltanschauung*. This latter conception, rather, was invented by *subjectivist* historicists such as Gustav Droysen and Heinrich Treitschke, who took the historian to be a scientific moralist who instructed politicians. Droysen and Treitschke rejected the “eunuchoid objectivity” (Droysen) of the objectivist and (though still sharing some ideas of objectivist historicism which was simply *not enough* for them) developed a decidedly *subjective* approach toward history. To overcome the idea of objectivism also was the ambition of large parts of 20th century continental philosophers (then in a setting that was no longer committed to objectivism at all), who took the task of the historian (or the interpreter, respectively) to be the “destruction” (Martin Heidegger) or “deconstruction” (Jacques Derrida) of history, rather than its *reconstruction*.

Besides these programmatic aspects historicism also possessed an important *methodological* perspective. Each variety of historicism was closely tied to a certain variety of *hermeneutics*, the method of *understanding*. The formula is very simple: early objectivist historicists were strongly committed to objectivist hermeneutics, whereas later subjectivists developed more subjectivist conceptions (some of them being utterly at odds with the earlier varieties). Hermeneutics emerged as *the* methodology of the humanities in German-speaking Europe already in the first half of the 19th century when historicism was not yet in play. Classical philologists like Boeckh and “positivist” theologians like Friedrich Schleiermacher developed hermeneutics as a method to reconstruct the very meaning of texts from historically distant sources, like the poetry of ancient Greek or the Bible. This method was based on the idea of *analogical reasoning*. We learn

understanding in the course of personal communication with others. These “elementary forms of understanding” (Dilthey) provide the main principles to decipher the utterances of others. We assume that people in different cultures behave similarly to some extent and try to figure out the differences, on a strictly empirical basis. Thus to understand the poem of an ancient poet we firstly have to study all kinds of sources that allow us to reconstruct ancient language, art, politics, economy, warfare, as well as all kinds of aspects of the ancients’ everyday life. On the basis of these comprehensive studies – indeed, the development of a universal *encyclopedia of the ancient world* – we reread the poem and only then try to grasp the authors intention intuitively. Intuition (“Gefühl”) does play a role in the hermeneutics of Boeckh and Schleiermacher, but in a very restricted sense. It constitutes only the final step of the process of understanding, where the hermeneuticist has to trust her “intuition which bases itself on the [perceived] similarity with the explanandum” (Boeckh et al 1886: 86). This final step can be successful only because it is conditioned by the accumulated empirical knowledge of the subject matter. This process of accumulation is somewhat circular, to be sure, because most of the empirical sources in question are *historical texts* and therefore have to be rendered accessible by means of hermeneutics in themselves. This “hermeneutic circle” (the term was invented by Boeckh), however, does not hamper the possibility of understanding, but rather is said to lead to a gradual sharpening of hermeneutic skills and a more holistic picture of historical knowledge (as in Otto Neurath’s boat or W.V.O. Quine’s web of belief). A consequence of this cumulative conception is that historians often know significantly more about the historical context than the historical actors and can exceed and correct their self-understanding, for these actors are *limited* by the

inaccessibility of numerous economical, political, etc. aspects of the historical context that become visible only afterwards. This is the core feature of the objectivist and “positivist” conception of hermeneutics. Not only is it possible to grasp the meaning of a historical utterance in the way it was intended by the utterer, but, under certain conditions, it is possible to grasp that meaning even more comprehensively than the utterer herself. The role of intuition is strictly limited insofar as empirical knowledge (i) allows distinguishing between good and bad intuition (the latter being based on insufficient knowledge) and (ii) restricts intuition to those intuitive scenarios of “elementary forms of understanding” familiar to the hermeneuticist from her everyday communication.

The limitation of Boeckh’s objectivist conception of hermeneutics was, according to Dilthey and other historicists, that the process of accumulation of historical knowledge was thought to terminate at some point (see Dilthey 1900/1996: 256). According to Boeckh, our knowledge would be complete and perfect and final understanding of historical sources would have been attained. Although the aprioricists (Lotze, Windelband, Rickert) held similar views, the empirically-minded historicists thought that different contexts of investigation may lead to different outcomes and therefore rejected the idea of complete knowledge. However, even Dilthey and his allies shared the hypotheses that objective understanding is possible and that a hermeneuticist is able to understand a historical figure even better than she understood herself. Understanding can never be *final* for Dilthey, but it can be objective and so objectively true or false (viz. relative to a certain context of investigation c^*). Dilthey’s hermeneutics reduce extremely complex and remote historical scenarios to situations accessible to simple intuitions about

cases of everyday communication. The “eunochoid objectivity” mocked by Droysen is exactly what “positivist” hermeneuticists like Dilthey had in mind.

The later development of (post-objectivist) hermeneutics in the 20th century must be divided into at least two different currents. There is hermeneutics as developed by students and followers of Dilthey such as Spranger and Bollnow who rejected the strong connection Boeckh and Dilthey saw between the natural sciences and the human sciences (historical encyclopaediae consist of empirical source studies and the collection of hard facts). For Spranger, the human sciences had to be developed in complete isolation from the natural sciences and the role of intuition was much enhanced. (Incidentally, the term “*Einführung*,” crucial for Spranger, did not play any significant role in Boeckh or Dilthey, the latter preferring objectivist “*Nachführung*” [1900/1996: 235].) Bollnow supplemented his radically subjective conception of understanding with a notion of “objectivity” that no longer meant intersubjectivity and general validity but “appropriateness”: there is true and objective knowledge which is not generally valid but restricted to a single knower (say, an epistemic “*Führer*”). Spranger and Bollnow took hermeneutics to form an exclusive alternative to the natural sciences and their epistemology of general validity. The second important current of 20th century hermeneutics is more explicitly directed against Dilthey. Philosophers like Heidegger, Hans-Georg Gadamer, and Jürgen Habermas rejected Dilthey’s “positivist self-misunderstanding” (Habermas) and replaced Dilthey’s “sovereign” notion of understanding (Gadamer) with the romanticism of “encountering the incomprehensible.” The most radical forms of anti-objectivist hermeneutics represented Heidegger and Derrida for whom the subject and with it

objectivity (in the sense of general validity of analogical conclusions between different minds) disappears: *reconstruction* becomes replaced with (arbitrary) *deconstruction*.

This historical development is, I believe, very important for gaining a proper assessment of the logical empiricists' stance toward hermeneutics and historicism, for some early logical empiricists (Carnap and Neurath) were deeply influenced by (and for some time even committed to) *objectivist* varieties of historicism and hermeneutics, whereas all logical empiricists always rejected all non-objectivist versions of historicism and hermeneutics. The logical empiricist reception of historicism and hermeneutic belongs to the rare but important cases of receptions of objectivism unshaken by 20th century trends of subjectivism, deconstructivism, postmodernism. Logical empiricism appears to be compatible with only one of the various different appearances of hermeneutics and historicism, namely, empirically-minded objectivism.

Table 1: Overview of 19th-20th century hermeneutics

Role of analogical reasoning	Role of intuition	Objectivism	Non-Objectivism
Analogical reasoning possible and crucial	<i>Cumulative objective knowledge plus a limited amount of "intuition"</i>	APRIORICISM Lotze, Windelband, Rickert	
		EMPIRICALLY-MINDED Steinthal, Lazarus, Cohen, Dilthey	EMOTIVISM Droysen, Treitschke
Analogical reasoning possible though not crucial	<i>Overwhelming importance of "empathy," empirical knowledge relatively irrelevant</i>		GENIUS- OR FÜHRER-OBJECTIVITY Spranger, Bollnow
Analogical reasoning impossible or irrelevant			ANTI-POSITIVIST HERMENEUTICS Gadamer, Habermas
			DECONSTRUCTIVISM Heidegger, Derrida
	<i>Entire irrelevance of the "subject"</i>		

Carnap: Hermeneutics in the *Aufbau*

Carnap's *Der Logische Aufbau der Welt* (Carnap 1928, henceforth: *Aufbau*) has a complex history (Damböck 2021). The first version was written before Carnap came to Vienna in 1926: the bulk of it was submitted to the Viennese faculty of philosophy for his habilitation in December 1925. The published version of 1928 contains a foreword that was written under the direct influence of the Viennese discussions (and Neurath, in particular) and also the final five paragraphs of the book seem to be heavily influenced by the Viennese discussions (and by Carnap's reading of Wittgenstein). The major parts of the book, however, to the best of our knowledge, were hardly revised after 1925: it seems that Carnap made radical cuts (the first version consisted of 226 sections, the published version has only 183) but did not alter the existing text in any substantial way. That the *Aufbau* was written mostly independently of the Viennese context is underscored by the fact that Carnap worked out important aspects of it already before 1925—and even before 1922/23 when he first got in touch with Moritz Schlick, Reichenbach and Neurath. The first sketches for the *Aufbau* date from 1920, written in the course of discussions Carnap had with his friends from the Jena Sera circle (a group associated with the German Youth Movement) at his house in Buchenbach near Freiburg (Dahms 2016). All of these early discussion partners—the sociologist Hans Freyer, the art historian Franz Roh, the pedagogue Wilhelm Flitner—belonged to the Dilthey school. It is not surprising then that Diltheyian notions dominate Carnap's early sketch of the “skeleton of the theory of knowledge” (ASP RC 081-05-04).

The “primary given,” according to Carnap's 1920 sketch, are the “experiences” (“Erlebnisse”) or “facts of consciousness” (“Bewusstseinstatsachen”). Like “elementary

experiences” in the *Aufbau* these elementary phenomenal facts comprise all mental phenomena we could ever be party to. Some of these experiences are intentional: they have “objects” and are called “representations” (“Vorstellungen”); some representations, in turn, are sensory experiences (“Empfindungen”). The objects of representations are either (other) representations or physical objects. One distinguished physical object is “my body.” “Others” have similarities with “my body”: “Some sequences of physical events of my body are often simultaneous with certain sequences of experiences; if I find sequences of events in other bodies then I produce the fiction that even their ‘experiences of another self’ occur.” (ASP RC 081-05-04)

Two aspects of this treatment are retained in the published version of *Aufbau*. First, the comprehensiveness of “experiences”: the task is to distinguish and reconstruct different modes of experience. Second, one crucial step in the course of these reconstructions is the step from one’s own to other minds. What allows this step is the “fiction” of analogical inference. Thus the *Aufbau* can be regarded as a hermeneutic conception in two ways. The entire group of so-called *higher spheres*—other minds, intersubjective and scientific objects—are constituted by means of analogical inference. In other words, there is no behaviorism in the *Aufbau* in any reductive sense: behavior is only *the bridge* that allows us to draw analogical conclusions *between different minds* (another option would be physiology §140). The other hermeneutic aspect in the *Aufbau* is represented by the fundamental notion of *elementary experiences*. Crucially, the employment of elementary experiences led to a more comprehensive notion of the empirical than is typically found in classical British and French empiricism and includes

not only sense-data but all kinds of mental phenomena. In this Carnap follows the empirically-minded objectivist hermeneuticists.

Neurath's Hermeneutic Conception of History

Unlike Carnap, who implemented hermeneutics on a rather ahistorical level—the constitution of other minds via analogical reasoning—the hermeneutic aspects in Neurath's philosophy also comprise the historical perspective (Uebel 2019). Neurath studied in Berlin in the early 1900s, among others, with Georg Simmel, and Friedrich Paulsen. His dissertation from 1906 was supervised by the ancient historian Eduard Meyer and the economist Gustav Schmoller (Sandner 2014: 34-48), both key representatives of hermeneutics and historicism of an objectivist fashion. In his dissertation, Neurath interprets a passage from Cicero in a typically historicist way, uncovering the various different historical perspectives on Cicero's text, being inevitably based on analogies between the recent world of the historian and the historical period in question. Neurath defends objectivist hermeneutics, but one that covers the different perspectives that emerge from different historical contexts; he is by no means an aprioricist, in the sense of Rickert or Windelband but is empirically-minded. Neurath also repeatedly refers to Boeckh, highlighting the importance of his encyclopedic treatment of ancient history and to other important representatives of an objectivist and encyclopedic treatment of philology and universal history such as Wolf, Niebuhr, Droysen (e.g., in 1909: 143).

Neurath's famous *Anti-Spengler* from 1921 is a powerful defense of an objectivist conception of hermeneutics, against Spengler's subjectivist approach. Neurath does not

criticize the idea of universal history as adopted by Spengler, but his relativistic method. Whereas the *good* relativism of historicism assumes that historical understanding must be based on analogical reasoning and therefore is always relative to some degree to the context where understanding takes place, the *bad* relativism (viz. Spengler's) rejects the idea of analogical reasoning as a whole and replaces it with an appeal to the power of the interpretive genius.

Subjectivist hermeneutics, for Neurath, does not only lead to fictitious results, it is self-contradictory. Neurath illustrates the latter by means of a brief dialogue from Zhuang Zhou (Chuang Tze) that was chosen by Neurath as a motto of *Anti-Spengler*. The key idea of this motto is iterated in Neurath's work over and over again: understanding *presupposes* analogical reasoning. Both understanding *and* the claim of the impossibility of understanding are based on analogical conclusions: they both prove the possibility of understanding. "If Spengler knows that we always misunderstand, he must at least think himself free from such misunderstanding, since he does not merely remain silent about other cultures, but also talks [about them]." (Neurath 1921/1973: 204)

Beside of its subjective nature, Spengler's account, according to Neurath, suffers from another typical failure of historical accounts devoid of analogical reasoning, namely "pseudorationalism." Spengler does not adopt intuition in the good sense which Neurath recognized as "something quite sober, a clear and comprehensive view which lacks proofs or even provability" (ibid.: 207). Rather, Spengler's "reckless way" (ibid.: 204) renders intuition entirely nebulous, "exercising a spell on many when it is surrounded by all kinds of mystery" (ibid.: 207).

Most importantly, Neurath's rejection of Spengler's subjectivist hermeneutics and historicism also converges with his famous "holism." The metaphor of Neurath's boat, which became famous as a key element of his later protocol sentence theory, already shows up in the just cited passage of *Anti-Spengler*. "We are like sailors who on the open sea must reconstruct their ship but are never able to start afresh from the bottom. Where a beam is taken away a new one must at once be put there, and for this the rest of the ship is used as support." (ibid.: 199) Remarkably, the context of this early appearance of the boat metaphor is Spengler's "wreckless" exaggeration of relativism. Our actions suffer from overestimations of commonalities between people who communicate but it is no less impaired by an *underestimation* of the possibility of understanding. Thus, the boat metaphor illustrates nothing else than the only possible encyclopedic (or holistic) solution to the hermeneutic circle: each single act of understanding has to be based on all of our knowledge and at the same time modifies and increases it (when a plank is replaced). Neurath mentions Duhem as his witness here but there can be no doubt that his own practice of objectivist hermeneutics forms the background of this key passage of *Anti-Spengler*. The subject is not the natural sciences but history, the human sciences, and the possibility of objective understanding; he is following Boeckh and his Berlin teachers here as much as Duhem.

Logical Empiricism from 1929 onwards: Empathy Skepticism

From the late 1920s onward, Neurath, Carnap and their followers (Hempel, in particular) became increasingly critical of hermeneutics and the possibility of an empathy-driven branch of science. Spengler was a main target here, but possibly even Neurath's teacher

Eduard Meyer, who became a strong advocate and defender of Spengler in the early 1920s (Meyer 1925). The discussions with Karl Bühler might also have played an important role here: Bühler was a strong defender of objectivist historicism and hermeneutics and he rejected Spranger's tendencies to divide the human and the natural sciences (see Bühler 2000: §8). Bühler, Carnap, and Neurath had various discussions, on the topic of understanding and construction of other minds. Carnap mentions these discussions several times in his diary, between 1925 and 1934. For example, at June 4, 1930 he discussed with Bühler and Lazarsfeld the "possibility of a behavioristic and nevertheless intersubjectively verifiable psychology of experience" (ASP RC 025-73-04). One could also rephrase this topic as "possibility of an objectivist hermeneutics." Bühler, Carnap, and Neurath certainly disagreed over key theses and concepts in the Vienna Circle's discussions like the protocol sentence debate. But there is no indication that they differed with regard to their shared objectivist attitude towards hermeneutics. Finally, Neurath's criticism of Max Weber was also an important motive for his rejection of aspects of historicism. Here, however, the point of criticism was not subjectivism, though, but rather the opposite: Neurath accused Weber of being a representative of Rickert-style aprioricism (Platonism).

What Carnap and Neurath actually rejected when they rejected empathy after 1929 were autonomous subjective forms of understanding that were no longer based on analogical reasoning at all, i.e., those varieties of "anti-positivist" hermeneutics that became dominant in the 20th century, from Spengler, Spranger, Heidegger, Bollnow, until Gadamer, Habermas, and Derrida. Logical empiricism is clearly incompatible with any understanding of understanding that does not employ analogical reasoning. Because

understanding and the humanities as a whole shifted away from the idea of analogical conclusion, during the 1920, and developed a “pseudorationalist” conception of empathy as a method of grasping the “unintelligible” (Gadamer) and the “mysterious” (Spengler), logical empiricism could not but demur. Their entirely critical reception of (pseudorationalist) empathy was formulated for the first time in the Vienna Circle’s manifesto (Verein Ernst Mach 1929), and then in various writings of Neurath and Carnap, from 1928 onward. However, close readings allow us to distinguish in all these cases between a negative attitude towards empathy (“Einfühlung”) that does not rely on analogical conclusion and a positive reception of understanding and intuition as being based on analogical conclusion. After 1945, one can find two diverging developments. The orthodoxy of logical empiricism (Hempel, until the late 1950, and younger authors such as Theodore Abel and Richard Rudner) takes the hypothetico-deductive conception to be entirely incompatible with the method of understanding (in all its varieties). From the late 1950s onward, however, Hempel developed more careful analyses that pick up the notion of analogical reasoning in a positive way again and try to show that the latter could be very well compatible with the hypothetico-deductive conception (Uebel 2009).

The Argument from Analogy Revisited

Reasoning by analogy allows us to talk about the mental states of others and to set up a framework that consistently allows us to distinguish between understanding and misunderstanding. Carnap’s and Neurath’s use of this form of reasoning makes clear that they were not possessed of eliminativist ambitions. But if, as has recently been argued, reading Carnap as a logical behaviourist who reductively defines mental states in terms of

behavioral manifestations is mistaken (Crawford 2013), then the question arises how he and Neurath could respond to criticism common since Ryle (1949) that analogical inference to other minds is fallacious. Would they have been happy to follow Ayer's defense of it (1956, 219-22) and able to improve upon it? Probably not, because neither Carnap and Neurath nor Dilthey used the argument from analogy for a (logical or ontological) *proof* of the existence of other minds. Rather, they used arguments from analogy because everything in the empirical world is *as if* other minds existed. Whether they *really* exist or not, is something that these philosophers were not concerned about. They only required a sound background for their framework that involves talk about other minds, understanding and misunderstanding. Here, arguments from analogy proved to be the appropriate tools.

References

- ASP = *Archives of Scientific Philosophy*. Hillman Library. University of Pittsburgh, Carnap Papers.
- Ayer, A. J. (1956) *The Problem of Knowledge*, Harmondsworth: Penguin Books.
- Boeckh, A., Bratuschek, E., Klußmann, R. (1886) *Encyklopädie und Methodologie der philologischen Wissenschaften*, Leipzig: Teubner.
- Bühler, K. (1928) *Die Krise der Psychologie*, Jena: Gustav Fischer. Repr. Weilerwist: Velbrück, 2000.
- Carnap, R. (1928) *Der Logische Aufbau der Welt*, Berlin: Weltkreis Verlag. Trans. *The Logical Structure of the World*, London: Routledge & Kegan Paul, 1967.

- (1934): “Theoretische Fragen und praktische Entscheidungen,” *Natur und Geist* 2: 257-60.
- Crawford, S. (2013): “The Myth of Logical Behaviourism and the Origins of Identity Theory,” in M. Beaney (ed.), *The Oxford Handbook of the History of Analytic Philosophy*, Oxford: Oxford University Press, pp. 621-55.
- Dahms, H.-J. (2016) “Carnap’s Early Conception of a ‘System of the Sciences’: The Importance of Wilhelm Ostwald,” in C. Damböck (ed.), *Influences on the Aufbau*. Dordrecht: Springer, pp. 163-86.
- Damböck, C. (2012) “Rudolf Carnap and Wilhelm Dilthey: ‘German’ Empiricism in the *Aufbau*,” in R. Creath (ed.), *Rudolf Carnap and the Legacy of Logical Empiricism*. Dordrecht: Springer, pp. 67-88.
- (2017): *(Deutscher Empirismus). Studien zur Philosophie im deutschsprachigen Raum 1830-1930*. Dordrecht: Springer.
- (2021) “Die Entwicklung von Carnaps *Aufbau* 1920-1928,” in C. Damböck and G. Wolters (eds.), *Young Carnap in an Historical Context: 1918-1935*, Dordrecht: Springer.
- (forthcoming) “Is there a hermeneutic aspect in Carnap’s *Aufbau*?,” in A. T. Tuboly and A. Sivadó, *The History of Understanding in Analytic Philosophy. Before and After Logical Empiricism*, London: Bloomsbury.
- Damböck, C., Feest, U., and Kusch, M. (eds.) (2012) *Descriptive Psychology and Völkerpsychologie—in the Contexts of Historicism, Relativism, and Naturalism*. HOPOS 10, no. 1.

- Dilthey, W. (1900) *Die Entstehung der Hermeneutik*, Tübingen: J.C.B. Mohr (Paul Siebeck). Trans. "The Rise of Hermeneutics" in Dilthey, *Hermeneutics and the Study of History. Selected Works, Volume VI* (ed. by R. A. Makkreel and F. Rodi), Princeton: Princeton University Press, pp. 235-59.
- Feest, U. (2007) "Science and Experience/Science of Experience: Gestalt Psychology and the Anti-Metaphysical Project of the Aufbau," *Perspectives on Science* 15: 1-25.
- Gabriel, G. (2004): "Introduction: Carnap Brought Home," in S. Awodey, C. Klein (eds.), *Carnap Brought Home. The View from Jena*, Chicago: Open Court, pp. 3-24.
- Meyer, E. (1925) *Spenglers Untergang des Abendlandes*, Berlin: Karl Curtius.
- Neurath, O. (1921) *Anti-Spengler*, Munich: Callwey. Excerpts trans. "Anti-Spengler" in Neurath 1973, pp. 158-213.
- (1906-07) "Zur Anschauung der Antike über Handel, Gewerbe und Landwirtschaft," *Jahrbücher für Nationalökonomie und Statistik* 32: 577-606 and 34: 145-205. Repr. in O. Neurath, *Gesammelte ökonomische, soziologische und sozialpolitische Schriften Teil 1* (ed. by R. Haller and U. Höfer). Vienna: Hölder-Pichler-Tempsky, pp. 25-110.
- (1909) *Antike Wirtschaftsgeschichte*, Leipzig: Teubner. Excerpts [but not chapter quoted above] trans. "Economic History of Antiquity" in O. Neurath, *Economic Writings. Selections 1904-1945* (ed. by T. Uebel and R.S. Cohen), Dordrecht: Kluwer, pp. 120-53.
- (1973) *Empiricism and Sociology* (ed. by M. Neurath and R.S. Cohen), Dordrecht: Reidel.
- Ryle, G. (1949) *The Concept of Mind*, London: Hutchinson's University Library.

- Sandner, G. (2014) *Otto Neurath. Eine politische Biografie*, Vienna: Zsolnay.
- Uebel, T. (2009) "Opposition to *Verstehen* in Orthodox Logical Empiricism," in U. Feest (ed.), *Historical Perspectives on Erklären and Verstehen*, Dordrecht: Springer, pp. 291-309.
- (2019) "Neurath on *Verstehen*," *European Journal of Philosophy* 27: 912-38,
- Verein Ernst Mach (ed.) (1929) *Wissenschaftliche Weltauffassung. Der Wiener Kreis*, Vienna: Wolf. Repr. and tans. "The Scientific World-Conception. The Vienna Circle" in F. Stadler and T. Uebel (eds.), *Wissenschaftliche Weltauffassung. Der Wiener Kreis. Hrsg. vom Verein Ernst Mach (1929)*, Vienna: Springer, 2012, pp. 75-115. (Part trans. "The Scientific Conception of the World. The Vienna Circle" in Neurath 1973, pp. 299-318.)

Further Reading

On the history of historicism and objectivist hermeneutics as well as the Diltheyian and historicist background of Carnap see (Damböck 2017): all references to material discussed early in this chapter can be found there. On Dilthey and Carnap see also (Dahms 2016; Damböck 2012; Gabriel 2004). On understanding in the Aufbau see Damböck (forthcoming). On Neurath's conception of understanding see (Uebel 2019); on later Logical Empiricist accounts of understanding see (Uebel 2009).