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On the Origins of Carnap's Aufbau From reductive empiricism to the Geisteswissenschaften

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Rudolf Carnap's *Der logische Aufbau der Welt* is considered to be the magnum opus of (early) analytic philosophy. Contrary to this analytic tradition stands, as the saying goes, everything else – the so called continental *philosophies*. It has been highlighted recently, however, that the contexts of the *Aufbau* differ radically from the usual received view. In order to obtain a better picture of (the influences of) the *Aufbau*, I will present in Sect. 1 the received view which characterizes the book as a reductive empiricist, foundationalist and phenomenalist work. In Sect. 2 I will show step-by-step that this view is mistaken and the influences on the *Aufbau* could be located around Neo-Kantianism, the philosophy of Husserl and the human sciences [Geisteswissenschaften]. The contribution of this paper is connected to these approaches and argues for a different and currently unanalyzed and mainly ignored aspect of Carnap's work, namely his theory of geistige Gegenstände. After all, I will claim that *the motivations and continental roots of the Aufbau are just much deeper than it is usually thought*.



Rudolf Carnap's early major work¹, *Der logische Aufbau der Welt*,² is considered to be the magnum opus of (early) analytic philosophy. Seemingly it instantiates every features of it: precise argumentation, rigorous concept usage, radical empiricism, anti-metaphysical and anti-historical basic stance and formal logical treatment of classical problems. This attitude and style contrast the work with the so-called *continental philosophies*. One could say that if analytic philosophy is to be characterized with one work – as opposed to the continental tradition – it is the *Aufbau*.

We have, however, very good reasons to think otherwise. The origins of the work, as well as the published material, are just more complex and cannot be approached from the perspective of one or two general tendencies. In order to facilitate our understanding of Carnap's philosophy in the *Aufbau*, I will overview the general (or received) reading of the book in Section 1. After that, in Section 2, I shall focus on those doubts and alternative traditions which undermine the main theses of the received view. At the end, our attention will be focused on a new and hitherto mostly unanalyzed aspect of the book, namely on Carnap's relation to the human sciences [Geisteswissenschaften]. The thesis which is supposed to be defended all along the way is that *the motivations and continental roots of the Aufbau go much deeper than they are usually thought*.

1 During my research connected to the basic idea of the paper I got many important and fruitful questions and suggestions (and also some unpublished manuscripts). I am indebted to André Cauris, Hans-Joachim Dahms, Christian Damböck, István Faragó-Szabó, Megyer Gyöngyösi, Thomas Mormann and Guillermo E. Rosado Haddock. I am also indebted to the Carnap Archives at Los Angeles (Rudolf Carnap papers (Collection 1029). UCLA Library Special Collections, Charles E. Young Research Library) and at Pittsburgh (Rudolf Carnap Papers, 1905-1970, ASP.1974.01, Special Collections Department, University of Pittsburgh) for the permission to quote the archive materials. All rights reserved. I cite the Pittsburgh Archive as follows: ASP RC XX-YY-ZZ, where XX is the box number, YY the folder number, and ZZ the item number. The present study is an extended and modified translation of my earlier Hungarian articles on Carnap. The research was supported by the Hungarian National Grant of Excellence.

2 Rudolf Carnap, *The Logical Structure of the World* (Chicago and La Salle, Illinois: Open Court, 1928/2005). I will refer to it as *Aufbau* with the number of the paragraphs.

1. The Received View

I will name as the “received view” that textbook-like idea which characterizes the *Aufbau* with three “isms”: (1) empiricism, (2) foundationalism, (3) phenomenism. Though the received view is not without reason – also Carnap seemed to strengthen this view from time to time retrospectively – we will see that at certain points it requires some completion, but at other points, it is just simply misleading.

1.1. *The Aufbau as an empiricist work*

The *Aufbau* is considered to be a work in the tradition of empiricism. By empiricism we understand here simply that approach which locates the origins of our knowledge solely in our senses, in our experiences. In a stronger sense, one could say that for a logical empiricist only those statements are intelligible which describe one’s own immediate experiences, or which follow from statements describing one’s experiential sensations. It is usually pointed out that the Vienna Circle is the most famous logical empiricist group and Carnap is often identified with the Circle.³ Carnap’s name has interwoven with the *Aufbau* and thus (transitively) the *Aufbau* is joined with empiricism.

Quine took Carnap as an integrant part of the empiricist tradition and characterized him “[as] the first empiricist who, not content with asserting the reducibility of science to terms of immediate experience, took serious steps toward carrying out the reduction.”⁴

One should not overlook, of course, that even the logical empiricists made a lot to strengthen this reading of them.⁵ The authors of the Circle’s manifesto, Carnap, Hans Hahn, and Otto Neurath,

3 Quine writes, for example, in a letter to Carnap that “Last term I gave a course on ‘Logical Positivism’, which is to say ‘Carnap.’” See 66/QC/1938-2-4/239.

4 W. V. O. Quine, “Two Dogmas of Empiricism,” in *From a Logical Point of View* (New York: Harper & Row Publishers, 1951/1963), 39.

5 According to the received view the pre-eminent example of this is the reductivist verificationism of Carnap. Rudolf Carnap, “The Elimination of Metaphysics Through the Logical Analysis of Language,” in *Logical Positivism*, edited by Alfred J. Ayer (New York: The Free Press, 1932/1959), 60–81.

which marks their official phase from 1929, claimed that “[w]e have characterized the *scientific world-conception* essentially by two features. First it is *empiricist* and *positivist*: there is knowledge only from experience, which rests on what is immediately given.”⁶ Even Alfred J. Ayer, who joined the meetings of the Circle for a short period and attended the seminars of Schlick, tried to connect the Vienna Circle to the heritage of Hume and Russell in his *Language, Truth and Logic*.⁷ Therefore, one can easily conclude that, according to the received view, the *Aufbau* and even logical empiricism, in general, are just modern versions of classical British empiricism.

1.2. *The Aufbau as a foundationalist work*

The second panel of the received view is centered on foundationalism. A foundationalist claims that there is a fundamental, certain, infallible base of knowledge on which our whole system of knowledge is built on; the ontological parallel of this claim is that the world consists of certain basic and fundamental entities from which the other entities are constructed.⁸ The fundamentalist program in the modern era goes back at least to Descartes’ “*cogito ergo sum*” but it emerged also in classical empiricism where the fundamental elements of one’s knowledge were special *ideas*.

Quine and Goodman are responsible – in the United States – to present the *Aufbau* as a foundationalist work. In the former’s “*Epistemology Naturalized*” – when Quine discussed the history of empiricist epistemology and Carnap’s place in the story – one finds such passages as: “The Cartesian quest for certainty had been the

6 Rudolf Carnap, Hans Hahn and Otto Neurath, “Scientific Conception of the World: The Vienna Circle,” in *Empiricism and Sociology*, edited by Marie Neurath and Robert S. Cohen (Dordrecht: Reidel, 1929/1973), 309. A similar reconstruction of the Circle and especially the *Aufbau* is given by Victor Kraft, a former member of the group. See Victor Kraft, *Der Wiener Kreis. Der Ursprung des Neopositivismus* (Springer-Verlag, 1950).

7 See Alfred J. Ayer, *Language, Truth and Logic* (New York: Dover Publications, 1936/1952), 32. ff.

8 In Russell’s external-world-project the ontological and the epistemological points of view seem to coincide at certain points.

remote motivation of epistemology, both on its conceptual and its doctrinal side; but that quest was seen as a lost cause.”⁹

The received view tells us that the main motivation of Carnap was to continue and elaborate Russell’s 1914 external-world-project: to find that fundamental base from which our knowledge of the world could be built up with certainty. As the textbook story goes, the *Aufbau* as a foundationalist work was doomed to failure due to its logical and epistemological errors.

1.3. *The Aufbau as a phenomenalist work*

The third element of the received view combines the first two since an answer is to be provided to the question: what is that epistemological/ontological base to which an empiricist should reduce the complex elements of knowledge? The answer is a special form of phenomenalism, the theory of sense data: statements about physical objects could be defined by those terms that describe one’s private *sense data*. Thus, in this case, the fundament of one’s knowledge is formed by isolated, atomic and private sense data which could not be analyzed further.

According to Nelson Goodman, “[t]he system [of the *Aufbau*] is plainly phenomenalic.”¹⁰ Phenomenalism in itself is not enough to characterize the system of the *Aufbau*; it shows only that the source of knowledge is located in one’s private sensations. Sense data theory is a special version of phenomenalism which was quite familiar back then. In the Vienna Circle, Ernst Mach’s sense data theory was referred to quite frequently but they also considered Carnap’s external world project as such a conception.¹¹ On the other hand, Carnap emphasized the important role of Russell’s sense data

9 W. V. O. Quine, “Epistemology Naturalized,” in *Ontological Relativity and other Essays* (Columbia University Press, 1969), 74.

10 Nelson Goodman, “The Significance of *Der logische Aufbau der Welt*,” in *The Philosophy of Rudolf Carnap*, edited by Paul A. Schilpp (Open Court, 1963), 545. Carnap also emphasizes this in his reply to Goodman. See Rudolf Carnap, “Nelson Goodman On *Der logische Aufbau der Welt*,” in *The Philosophy of Rudolf Carnap*, edited by Paul A. Schilpp (Open Court, 1963), 945.

11 See for example Carnap–Hahn–Neurath, “Scientific Conception...”; and Philipp Frank, *Modern Science and its Philosophy* (New York: George Braziller, 1949).

theory and its effect on his early philosophy. In his intellectual autobiography, he described Russell's project as the main source of his *Aufbau*.¹² Furthermore, the motto of the *Aufbau* (§1) was a quotation from Russell: "The supreme maxim in scientific philosophizing is this: Wherever possible, logical constructions are to be substituted for inferred entities."¹³

Quine could be marked, at least partly, as responsible also for the sense data/phenomenalist reading of the *Aufbau*.¹⁴ Both in "Two Dogmas of Empiricism" and "Epistemology Naturalized" he viewed the *Aufbau* from the mentioned perspective:

Radical reductionism, conceived now with statements as units, set itself the task of specifying a sense-datum language and showing how to translate the rest of significant discourse, statement by statement, into it. Carnap embarked on this project in the *Aufbau*.¹⁵

To account for the external world as a logical construct of sense data – such, in Russell's terms, was the program. It was Carnap, in his *Der logische Aufbau der Welt* of 1928, who came nearest to executing it. [...] Carnap's constructions, if carried successfully to completion, would have enabled us to translate all sentences about the world into terms of sense data, or observation, plus logic and set theory.¹⁶

To summarize the received view: Carnap's *Aufbau* is such a work in philosophy which is a logical heir of classical (and Russell-type) empiricism where the fundamental base of our knowledge is the phenomenalist sense-data. The set of meaningful statements consists only in statements about sense-data or a logical construction from those statements.

12 Rudolf Carnap, "Intellectual Autobiography," in *The Philosophy of Rudolf Carnap*, edited by Paul A. Schilpp, (Open Court, 1963), 13.

13 See Bertrand Russell, "The Relation of Sense-Data to Physics," *Scientia* 1914 (16):155.

14 In the United Kingdom this role was fulfilled by Ayer who presented and defended the sense data theory in his *Language, Truth and Logic*.

15 Quine, "Two Dogmas..." 39.

16 Quine, "Epistemology Naturalized ..." 74.

2. The rehabilitation of the *Aufbau*

My aim is twofold in this section. On the one hand, I will overview the main panels of the recent secondary literature on Carnap in order to shed some light on how people on both sides of the Atlantic Ocean consider the rehabilitation of Carnap. I shall deal with it in three steps following the three aspects of the received view. On the other hand, I will sketch such a partial interpretation of the *Aufbau* which was neglected so far.

2.1. *The non-empiricists roots of the Aufbau*

Though it is well motivated to view the *Aufbau* from the tradition of empiricism, in fact, it never served as the *only* and *absolute* base for Carnap as it was, for example, for Locke, Berkeley or Hume.¹⁷ If empiricism is not the only source of the *Aufbau* then what are the other sources? Neo-Kantianism was in the last few decades the most discussed and investigated tradition in the context of Carnap. This reading of the *Aufbau* was defended mainly by Michael Friedman and Alan Richardson¹⁸ who claimed that the main notions, motivations, and solutions of the *Aufbau* are organically related to the German Neo-Kantian tendencies. In their view, the main question of the work is a transcendental one: “How is intersubjective/objective scientific knowledge possible at all?” One should read the

17 In “Testability and Meaning” Carnap claimed that though empiricism is obviously present in his works it is only a *hypotheses*, a *suggestion* which should be judged by its success and pragmatic virtues and not by its truth (Rudolf Carnap, “Testability and Meaning – Continued,” *The Philosophy of Science* 4 (1): 33). Hence one shall think of a *methodological empiricism* and not a substantive, true-or-false philosophical thesis. This seems to be confirmed also by the fact that in the *Aufbau* Carnap developed a neutral language for the then-current epistemological schools, see §§176-178.

18 See Alan W. Richardson, *Carnap’s Construction of the World – The Aufbau and the Emergence of Logical Empiricism* (Cambridge University Press, 1998); and Michael Friedman, *Reconsidering Logical Positivism* (Cambridge University Press, 1999). Of course many other scholars have claimed for a (Neo-)Kantian reading of the *Aufbau* before the 1990s – for them see the references in the mentioned works.

Aufbau as providing a detailed answer to this question¹⁹ (and I will come back to that later).

The Neo-Kantian roots of Carnap's intellectual development are documented quite well. He was educated at the universities of Jena and Freiburg between 1910 and 1914. In Jena, one of his teachers was the Neo-Kantian Bruno Bauch (who was also the editor of *Kant Studien* until 1916) who gave lectures on Kant's first critique for two semesters. After the First World War Bauch became Carnap's *Doktorvater*.²⁰ In the dissertation (which was completed in 1921 and published in *Kant Studien* in 1922) Carnap discussed the different meanings and frames of the notion of space, one of which was "intuitive space" based on the ideas of Kant and partly of Husserl.²¹

19 The (Neo-)Kantian tendencies could be detected in many other places of the *Aufbau*. For example see Friedman's claim: "[logical empiricists and Carnap's] central philosophical innovation is not a new version of radical empiricism but rather a new conception of a priori knowledge and its role in empirical knowledge." Friedman, *Reconsidering...*, xv.

20 Carnap had a lot of problems with his dissertation. First he wanted to submit a proposal (about axiomatic foundations of kinematics) to the physics department but it was too philosophical for them (as claimed by Max Wien), then he went to the philosophy department but it was too physical for them. At one point he asked also Hugo Dingler to be his supervisor (ASP RC 028-12-11) but after all Bruno Bauch has undertaken the task and oriented Carnap towards the philosophy of geometry. See Carnap, "Intellectual Autobiography," 11.

21 About Carnap's conception of space and geometry and his dissertation see Adolf Grünbaum, "Carnap's View on the Foundations of Geometry," in *The Philosophy of Rudolf Carnap*, edited by Paul A. Schilpp (Open Court, 1963), 599-684; and Thomas Mormann, "Geometrical leitmotifs in Carnap's early philosophy," in *The Cambridge Companion to Carnap*, edited by Michael Friedman, Richard Creath, (Cambridge University Press, 2007), 43-64. According to Mormann Carnap's philosophy of geometry in the 1920s contained the leitmotifs of the later metaphysical commitments. Interestingly, after that Carnap presented his method of quasi-analyses in the *Aufbau* which was applied also to geometrical objects, in his later works he did not touch upon the questions of the recent developments of geometry. A few exceptions could be found in his introductory book to philosophy of science (Rudolf Carnap, *An Introduction to the Philosophy of Science*, edited by Martin Gardner (New York: Dover Publications, In, 1966/1995)), in his reply to Grünbaum (Rudolf Carnap, "Adolf Grünbaum on the Philosophy of Space and Time," in *The Philosophy of Rudolf Carnap*, edited by Paul A. Schilpp, (Open Court, 1963), 952-958) and a few lectures in the Vienna Circle in the early 1930s (see ASP RC 110-09-04 and a lecture presented at the Dessau Bauhaus, ASP RC 110-07-48).

Though it is really hard to neglect the tradition of Neo-Kantianism in the case of a scholar who had been socialized and educated in the institutional frameworks of the early twentieth century Germany, the defenders of the influence of German philosophy on Carnap's work claim that the motivation and aims of the *Aufbau* cannot be understood without referring to Neo-Kantianism (so the influence is not just a contingent fact but a substantial one):

Carnap's problem [in the *Aufbau*] is how to account for the objectivity of knowledge despite its subjective origins. The *problem itself* and the *role of formal notions* in its solution, combined with indubitable facts about the sort of *philosophical education* Carnap received in the 1910s in Jena, reorient the story toward a rather different philosophical tradition from Russell's – the *tradition of scientific neo-Kantianism* that was in full flower in the Marburg and Southwest schools in the first quarter of the twentieth century.²²

We cannot move on without mentioning another tradition that had a huge influence on Carnap's general thought and world-view.²³ André Carus devoted a whole book to the interpretation which claims that Carnap's philosophy and

[t]he conceptual framework he created is still the most promising instrument [...] for the very purpose he invented it to serve, in the somewhat utopian Vienna Circle context of the 1920s and early 1930s: it is still the best basis for a comprehensive and internally consistent *Enlightenment world view*.²⁴

Carus argues that the works of Carnap (and some other members of the Vienna Circle) could be interpreted as the most successful attempts to revive the spirit of Enlightenment in the twentieth century.²⁵ Though Carus' main aim is to show that through the late Carnap's notion and method of explication provide the base to understand the idea of Enlightenment and conceptual engineering

22 Richardson, *Carnap's Construction...*, 2. Italics added.

23 The further non-empiricists roots of the *Aufbau* will be discussed in sections 2.2-3-4.

24 André Carus, *Carnap and Twentieth-Century Thought: Explication as Enlightenment* (Cambridge: Cambridge University Press, 2007), 8. Italics added.

25 On the influence of Enlightenment on Carnap see also Jacques Bouveresse, "Rudolf Carnap and the Legacy of *Aufklärung*," in *Carnap's Ideal of Explication and Naturalism*, edited by Richard Wagner, (Palgrave Macmillan, 2012), 47–62.

of Carnap, some traits, and leitmotifs of them could be revealed also in the social and cultural connotations of the *Aufbau* as well as in its worldview [Weltanschauung] (I will discuss these points later on).

2.2. *The non-foundationalist reading of the Aufbau*

Many passages of the *Aufbau* seem to imply that one cannot interpret it as a work in the tradition of foundationalism. Though – as I mentioned earlier – Carnap designates Russell as his principal source in the *Aufbau*, in fact, he distanced himself from Russell's more metaphysical foundationalist project (§176). If we take the foundational project as a substantive ontological claim which states that there is a basic, fundamental level of entities (sense data, according to Russell) to which we can reduce all the other complex entities (hence the elements of the external world would be logical constructions of these basic entities), then this thesis is not contained in the *Aufbau*.

Carnap treated these kinds of metaphysical claims as being outside of science and scientific philosophy, hence the question – how is the world built up from an ontological point of view – is not a concern of the *Aufbau*-project.²⁶ Though Carnap dealt with our knowledge about the external world and reality (§§170–178) he distinguished the *empirical* and the *metaphysical* notions of reality (§§175–178). While the former involves scientific questions – which shall be answered by empirical means – and hence its conceptual

26 The *Aufbau* does not contain the usual verificationist arguments against metaphysics as they were present in the “Überwindung” article. Carnap started to use them only in his *Scheinprobleme in der Philosophie*; the reason is that while the most parts of the *Aufbau* was already written before Carnap went to Vienna, he worked out the *Scheinprobleme* during his stay in Vienna and thus it shows the influence of the Circle (the *Aufbau* was after all his *Habilitationsschrift* which he submitted to University of Vienna in 1925). That time Wittgenstein's *Tractatus* was still on the table and the members of the Circle interpreted it as presenting a verificationist argument against metaphysics (see Carnap, “Intellectual Autobiography,” 24. ff.). The Circle started to read the *Tractatus* (after that Kurt Reidemeister introduced it in 1924) in November 1925 (ASP RC 029-32-34) and continued reading it in the next semester (ASP RC 029-32-27). About the specific arguments of the *Aufbau* see Michael Friedman, “The *Aufbau* and the rejection of metaphysics,” in *The Cambridge Companion to Carnap*, edited by Michael Friedman, Richard Creath (Cambridge University Press, 2007), 129–152.

framework could be integrated into the language of the *Aufbau*, the questions about the metaphysical reality stem from the fact, in a Kantian fashion, that particular philosophical schools “*transgress their proper boundaries*” (§178).

The foundationalist approach, however, has an epistemological reading too. From this angle, it claims that we depict one of our cognitive faculties and states its priority over the others. One could claim (quite schematically) that empiricism emphasized the role of sensation while rationalism emphasized the role of our intellectual capacities.²⁷

The structure of the *Aufbau*'s system differs from both foundationalist projects. Instead of one final base on which one can construct our knowledge, Carnap developed a *constitution system* [Konstitutionssystem] of knowledge. A constitutional system is just “an epistemic-logical system of objects or concepts” (§1), that is “a step-by-step ordering of objects in such a way that the objects of each level are constituted from those of the lower levels” (§2). Though Carnap is talking about the constitution of objects, he makes it clear at the beginnings that he takes “object” [Gegenstand] in a wide sense, so “among objects [Gegenständen] we count not only things [Dinge], but also properties and classes, relations in extension and intension, states and event, what is actual as well as what is not” (§1). Similarly, a few paragraphs later Carnap says that he won't make any difference between objects and concepts [Begriffe], since

[a]ctually, we have here not two conceptions, but only two different interpretative modes of speech. Thus, in a constitution theory we sometimes speak of constituted objects, sometimes of constituted concepts, without differentiating. These two parallel languages which deal with concepts and with objects and still say the same thing are actually the languages of realism and idealism. [...] Constitution theory employs a neutral language and maintains that objects are neither “created” nor “apprehended” but *constituted*. I wish to emphasize from the beginning that the phrase “to constitute” is always meant in a completely neutral sense. From the point of view of constitution theory, the controversy between “creation”

27 In the preface to the second edition of the *Aufbau* Carnap emphasized the very same mistake of pure empiricism and pure rationalism. See *Aufbau*, vi.

[Erzeugen] and “apprehension” [Erkennen] is an idle linguistic dispute.²⁸

One can see from these passages that Carnap is not concerned with ontological questions; when he is dealing with the constitution of objects he is not engaged in the logical *construction* of objects – as Russell – but in the *constitution of our conceptual knowledge*.

One should note here the following. The Anglo-Saxon reception of the *Aufbau* was highly determined by the English translation of Rolf A. George.²⁹ First of all the title of the English edition, *The Logical Structure of the World* is somehow misleading and obscures the *cultural* and *social* involvement of the German term “Aufbau”. As Peter Galison pointed out, “Aufbau” means not just structure, reconstruction or rebuilding, but refers to the process of “sweep[ing] out the old order and to build anew”.³⁰ All of those who belonged to the different “Aufbau-projects” tried to break with past traditions in order to achieve an unprecedented building and were deeply convinced that the “Aufbau” could not be superficial.³¹ “It had to embody not just the trappings of political change — it had to transform culture, education, architecture, and the modes of reasoning that guide us through the world” because “[w]orld structure and inner life were bound together: modifying even the vocabulary of expression became a way of modifying thinking.”³²

“Aufbau” meant, therefore, the overall and comprehensive reform and transformation of culture and social order; it had to include also the modernization and rationalization of our theoretical and

28 *Aufbau*, §5.

29 Of course, many of the articles which document the received view were published before the English edition of the *Aufbau*, so one shall not blame solely the translation of George.

30 Peter Galison, “Constructing Modernism: The Cultural Location of *Aufbau*,” in *Origins of Logical Empiricism*, edited by Ronald N Giere, Alan W. Richardson (University of Minnesota Press, 1996), 18.

31 Dilthey, for example, had his own “Aufbau”, *Der Aufbau der geschichtlichen Welt in den Geisteswissenschaften*. Later in 1932, Alfred Schütz, the Austrian social scientist, inspired by phenomenology, also wrote an “Aufbau”, *Der sinnhafte Aufbau der sozialen Welt: eine Einleitung in die verstehende Soziologie*, which could be read as a reaction to Carnap’s allegedly pure logical “Aufbau” showing the meaningful structure (*sinnhafte Aufbau*) of the world.

32 Galison, “Constructing Modernism...”, 18 and 31.

practical knowledge and conceptualization usually after a huge failure, destruction, trauma or drama. From a social and political point of view, these traumas were the First and Second World Wars along with the status of technology in the wars and in the life of society. From the side of philosophy, it was connected to the revolutions in physics around the turn of the twentieth century. The philosophical “Aufbau” relies on the phenomenon that philosophy couldn’t keep abreast of its time and the scientific achievements within it.³³

We have to note, however, that the title of the book, “Aufbau”, was suggested by Schlick – Carnap’s earlier preferred titles were, for example, “Vom Chaos zur Wirklichkeit”, “Prolegomena zu einer Konstitutionstheorie der Wirklichkeit.”³⁴ This could mean that it shows the preferences of Schlick and not that of Carnap, but the content of the *Aufbau* and Carnap’s intellectual development makes it clear that the title suggested by Schlick was just apt for Carnap’s purposes.

George translated the core concepts of the *Aufbau* (“konstituieren” and “Konstitutionssystem”) as “construction” and “constructional system” and so strengthened the received view of the book.³⁵ While Russell dealt with the logical construction of objects of the external world, Carnap used the German “Konstruktion” quite rarely, and especially not in the context of describing his own aims

33 Galison connects the translation of “Aufbau” to “structure” in the title with the cultural and social influences of the 1960s in the United States, cf. Galison, “Constructing Modernism...”, 40 ff.

34 Cf. Alberto Coffa, *The Semantic Tradition from Kant to Carnap: To the Vienna Station* (Cambridge University Press, 1991), 403, n. 11. In the unedited autobiography Carnap also mentions Schlick in the context of choosing the final title. See Carnap 1957, UCLA, Box 2, CM3, MA-3, p. E28. I would like to thank Christian Damböck for pointing this out. See also the correspondence between Schlick and Carnap about the title, ASP RC 029-32-23; ASP RC 029-32-21; ASP RC 029-32-17; ASP RC 029-30-36.

35 For the origins and details of the term “konstituieren” see Robert Sokolowski, *The Formation of Husserl’s Concept of Constitution* (The Hague: Nijhoff, 1970). In the case of Husserl, Sokolowski connects the notion to the Neo-Kantian Paul Natorp, who also had an important influence on the young Carnap (see Carnap, “Intellectual Autobiography,” 12; and 1957, UCLA, Box 2, CM3, MA-3.) and who is referred to in the *Aufbau* quite frequently (§§5, 64, 65, 162, 163, 179.) It is also known from the personal reading list of Carnap that he read the works of Natorp several times between 1920 and 1922. See ASP RC 025-03-05.

and works. The translation of George is dangerous because it moves Carnap's metaphysically neutral and Russell's metaphysically committed projects too close to each other and thus obscures the context of the *Aufbau* – those cultural, social, political and philosophical traditions in which it was born.

The notions of “constitution”, “constitution system” and “constitution theory” suggest that Carnap is strongly connected both to Neo-Kantianism and to the philosophy of Edmund Husserl. It is known that when Carnap was living in Buchenbach near to Freiburg between 1919 and 1925 (just before he went to Vienna), he attended the seminars of Husserl and even some Husserlian circles after the seminars in the academic year 1924/25.³⁶ But Carnap was dealing with many works of Husserl even at the time when he was working on his dissertation between 1919 and 1921.³⁷ Though there are different views about Husserl's role in the *Aufbau*,³⁸ it is evidently true

36 Karl Schuhmann, *Husserl-Chronik* (The Hague: Nijhoff, 1977), 281.; and Karl Schuhmann, *Edmund Husserl: Briefwechsel, Band IV* (Boston: Kluwer, 1994), 298. Carnap's diary also proves this. In that we can follow step-by-step that he asked permission from Husserl to join his seminar (ASP RC 025-72-02, Nov. 13.), that Husserl allowed it (Nov. 17.), that Carnap read *Ideen* in order to prepare for the seminar (Nov. 1923), that he gave a talk at the seminar (ASP RC 025-72-03, Jan. 23.), and that he attended the discussions after Husserl's seminars in January 1924 (among the participants were Ludwig Landgrebe and Bernhard Merten).

37 Rosado Haddock (2008, ix-x) argued that Kant was integrated into Carnap's dissertation only due to the influence of Bauch and Husserl's influence was much more important. Guillermo E. Rosado Haddock, *The Young Carnap's Unknown Master* (Aldershot: Ashgate Publishing Limited, 2008), ix-x. André Carus showed quite convincingly, however, that the first versions of the dissertation did not contain any reference to Husserl so the citation of Kant could be not just a “cosmetic-move”. André Carus, *Carnap and Twentieth-Century Thought: Explication as Enlightenment* (Cambridge University Press, 2007: 109–115, 127–138); and André Carus, “Carnap and Phenomenology: What Happened in 1924?,” in *Influences on the Aufbau*, edited by Christian Damböck (Springer, 2016:137-162).

38 According to Sarkar and Rosado Haddock Husserl provided the main influence on the early Carnap's thought. Others (like Carus and Roy) are skeptical about Husserl's role. See further V. E. Mayer Mayer, “Die Konstruktion der Erfahrungswelt: Carnap und Husserl,” in *Erkenntnis Orientated: A Centennial Volume for Rudolf Carnap and Hans Reichenbach*, edited by Wolfgang Spohn, (Springer, 1991), 287–303; and Thomas Ryckman, “Carnap and Husserl,” in *The*

that when Carnap refers to Husserl in the *Aufbau* (§§3, 64, 65, 124, 164) he does it in a quite positive manner.

To account for one possible effect of Husserl on the *Aufbau* one has to take a look at its constitution system which is a *multilayered theory of knowledge* (MTK). MTK is characterized by Deodáth Zuh as

[...] a theory on the structure and functioning of human cognition set up as a layered architecture of simple and complex factual capacities and faculties of knowledge. [...] They are separate faculties fulfilling separate cognitive roles, which must communicate and cooperate with each other to implement a coherent way of perceiving and understanding the world. It should be admitted, that such communicating layers could be unequal in their concrete working (in everyday or enclosed scientific cases), or that a specific faculty could dominate the other(s), but their theoretical ease for cooperation is of utmost importance. This is why it is a theory on the possible grounds of knowledge, on how knowledge should be set together and not on a current state of representing something through a unique source of knowledge. It must be labeled as a transcendental theory of cognition, where the one-sided priority of a specific faculty is considered to be strongly reductive and subsequently a philosophical error.³⁹

The two cornerstones of MTK are that (1) our cognitive capacities are divided into simple and complex ones where the latter are built on the former ones and (2) these capacities are “communicating” with each other or work together in order not to exceed their own boundaries and to produce knowledge.

Besides Husserl,⁴⁰ the most important figure is Kant who claimed in accordance with (1) and (2) that “[t]houghts without content are empty, intuitions without concepts are blind.”⁴¹ Kant tried to show

Cambridge Companion to Carnap, edited by Michael Friedman and Richard Creath (Cambridge University Press, 2007), 81–105.

39 Deodáth Zuh, “Arnold Hauser and the multilayer theory of knowledge,” *Studies in East European Thought*. Forthcoming. 45–46.

40 Most of Husserl remarks about the MTK are scattered in his writings but important points could be found in his 1930/1960, especially 67–69; 1936/1970, §§2–4 and 1929/1969. Some important ideas of MTK are also to be found in his 1891/2003.

41 Immanuel Kant, *The Critique of Pure Reason* (Cambridge University Press, 1787/2000), 193–194. See also Immanuel Kant, “On the Form and Principles of the

that the erroneous moment in empiricism and rationalism was that both of them highlighted one of our cognitive capacities and tried to force it to produce the substantial knowledge elements. Kant's transcendental philosophy, however, was one of the first steps to show that knowledge can be achieved only through the joint work of all our cognitive faculties.

While Kant and Husserl aimed to reveal our epistemic capacities, the cognitive structures of the mind and how they yield various kinds of knowledge, Carnap was interested only in our *conceptual knowledge* (see §§180-182), in the logical relations between (empirical) concepts and sentences made out of them.⁴²

Carnap's MTK works with at least four different layers,⁴³ or levels of objects: at the first level are the *autopsychological* objects (§§106-122): "the acts of consciousness: perceptions, representations [Vorstellungen], feelings, thoughts, acts of will, and so on. (§18)" On the second layer are the *physical* objects: "these are characterized by the fact that, at a given time, they occupy a given space (i.e., an extended piece of space). Thus, place, shape, size, and position belong to the determining characteristics of any physical body. (§18)" The third level consists of the so-called *heteropsychological* objects which are the same as the autopsychological ones but belong to another individual. The fourth layer is for *geistige Gegenstände* (I shall deal with them later).

These layers are built on each other, and though each base has its own laws, properties and structure, they are reducible: *geistige Gegenstände* can be reduced to heteropsychological (and physical) ones, which in turn can be reduced to physical ones and they could

Sensible and Intelligible World," In *Theoretical Philosophy 1755-1770*, Cambridge University Press (1770/1992), 373-410; and Immanuel Kant, *Anthropology from a Pragmatic Point of View* (Cambridge University Press, 1800/2006).

42 Carnap mentions Husserl also in the historical context of the constitution theory (§3) and despite the many similarities, Jean-Michel Roy lists important differences. Jean-Michel Roy, "Carnap's Husserlian Reading of the *Aufbau*," in *Carnap Brought Home - The View from Jena*, edited by Stewe Awodey and Carsten Klein (La Salle: Open Court, 2004), 41-62.

43 In §25 Carnap is introducing more layers and object types than the ones discussed here. He talks about logical objects, mathematical objects, the object types of spatial configurations, colors, pitches, odors, tastes, biological objects, ethical objects, values etc.

be reduced to the autopsychological objects.⁴⁴ This reduction is, however, not an ontological, but a *logical* one as I mentioned earlier: it deals with sentences about these objects and their logical relationships.⁴⁵ Thus, the *Aufbau* is not concerned with the more and more complex cognitive capacities but with the logical reduction and constitution of sentences which *codifies* our knowledge about the various objects. Constitution theory is just about the idea that the (empirical) statements describe different spheres of objects (§29) which “are brought into a stratified order within the constitutional system by constituting some of these objects on the basis of others” (§41). So Carnap’s constitution theory – by contrast to Husserl’s who was interested in the pre-predicative level also – is applied mainly to the predicative level, to the linguistically articulated concepts.

The first level of the *Aufbau* is the domain of the autopsychological objects (§§63–64). Carnap tried to derive the statements about the higher-level objects from the statements about the lower level objects. At this point one is faced with an important difference between Carnap and the usual reductive empiricist works which search for the fundamental level of our knowledge. Carnap states that such a constitutional system whose basic level contains not autopsychological but *physical objects* is also possible and legitimate (§§59, 62). It is a practical decision, according to him, which one we choose and our decision depends on our aims: if we want to follow the epistemic order of knowledge, then we shall choose the autopsychological level, but if we focus on the needs of the empirical sciences, then “the constitution system with physical basis constitutes a more appropriate arrangement of concepts than any other” (§59).

This tolerance was always in the foreground of Carnap’s intellectual development, i.e. Carnap committed himself not to certain philosophical positions but to a methodology and attitude; this atti-

44 Interestingly the domain of values [Werte], for example, seems to be reducible directly to the autopsychological layer. Cf. *Aufbau*, §152.

45 See Thomas Uebel, “Carnap’s *Aufbau* and Physicalism: What Does the ‘Mutual Reducibility’ of Psychological and Physical Objects Amount to?” in *European Philosophy of Science – Philosophy of Science in Europe and the Viennese Heritage*, Vienna Circle Institute Yearbook, Vol. 17., edited by Maria C. Galavotti, Elisabeth Nemeth and Friedrich Stadler, Springer, 2014), 45–56.

tude was formulated later explicitly in his *principle of tolerance*.⁴⁶ As Michael Friedman said,

Carnap nowhere employs the traditional epistemological vocabulary of “certainty,” “justification,” “doubt,” and so on in the *Aufbau*. He nowhere says that knowledge of autopsychological objects is more certain or more secure than knowledge of physical objects, and the distinction between “hard data” and “soft data” central to Russell’s motivation for his construction of the external world is entirely foreign to the *Aufbau*.⁴⁷

Recall our earlier transcendental question: “How is intersubjective scientific knowledge possible at all?” – Carnap gives not a typical foundationalist answer, but a structuralist one:

[...] even though the material of the individual streams of experience is completely different [...] certain structural properties are analogous for all streams of experience. Now, if science is to be objective, then it must restrict itself to statements about such structural properties [...].⁴⁸

One should conclude therefore that the *Aufbau* is not a foundationalist work in the camp of reductive empiricism and most of its passages could be interpreted more properly in the context and tradition of the Kantian-Husserlian constitution theory.

2.3. *The Aufbau and the readings of phenomenism*

Most critiques of the *Aufbau* objected to Carnap that his book is a reductionist, phenomenalist work and as such – based on the arguments against the sense data theory – was doomed to failure. Since Carnap chose the autopsychological level as his base (and started from the private sensations of individuals) it could be hard to deny that a certain phenomenalist view dominated the *Aufbau*. From this angle some of the criticisms against the book seem to be justified; nonetheless, we shall consider one important aspect of Carnap’s work.

46 See Rudolf Carnap, *Logische Syntax der Sprache* (Wien: Springer, 1934), §17.

47 Friedman, *Reconsidering...*, 119.

48 *Aufbau*, §66.

The approach to be found in the *Aufbau* was not a typical and classical phenomenalist sense data theory. Such theories (like Hume's, Mach's, Russell's and Ayer's) take as given the primitive and atomic sensations (like colors, forms, sounds) and reduce the complex ones to these. In Carnap's constitution system, however, the typical sense data occurs only at a late and complex level.⁴⁹ Carnap's starting points were the "elementary experiences" [*Elementarerlebnisse*],⁵⁰ a special totality of experiences instead of isolated and atomic ones (§67): "Modern psychological research has confirmed more and more that, in the various sense modalities, the total impression is epistemically primary, and that the so-called individual sensations are derived only through abstractions [...]." So on the base of the results of Gestalt-psychology,⁵¹ Carnap defended a holistic picture of knowledge and experience and rejected the "atomist" approaches.⁵²

49 Cf. Friedman, *Reconsidering...*, 91.

50 Carnap claims that knowledge is constituted on the base of a single relation between the *Elementarerlebnisse* called "the recollection of similarities" [*Ähnlichkeitserinnerung*]. The idea of the recollection of the similarities and the role of memory in knowledge-forming was a quite common approach that time. One source of Carnap might have been the Nobel-prize winner chemist Wilhelm Ostwald. Ostwald claimed in his *Grundriß der Naturphilosophie* from 1908 [*Outline of Natural Philosophy*] that "[f]or the human mind [...] the world appears first as a chaos which consists in discrete experiences. The only connection between them is limited to the fact that they are sequenced. From these experiences [Erlebnisse] [...] some of them emerges as recurring more often and thus gets a distinctive character: it become *familiar*. It stems from the fact that we *remember* [sich erinnern] the earlier similar experiences, i.e. we feel a certain connection between the present and certain earlier experiences." (Wilhelm Ostwald, *Grundriss der Naturphilosophie* (Leipzig: Philipp Reclam.1908), 19. My translation.) It is known that Carnap read Ostwald already before his student years (ASP RC 025-98-01 and ASP RC 025-97-01) and before the preparation of the *Aufbau* (ASP RC 025-03-05). On the relation between Carnap and Ostwald see Hans-Joachim Dahms, "Carnap's Early Conception of a 'System of all Concepts': The Importance of Wilhelm Ostwald," in *Influences on the Aufbau*, edited by Christian Damböck (Springer, 2016), 163-185.

51 On the influence of Gestalt-psychology see Carnap, "Intellectual Autobiography," 16.

52 See *Aufbau*, §§76, 36, 71. Some of the main representatives and defenders of Gestalt-psychology (like Wolfgang Köhler and Kurt Lewin) was a close associate of Carnap as a member of the Berlin Group led by Hans Reichenbach.

Based on this, Friedman's question – namely that if Carnap were to justify the classical foundationalist-phenomenalist empiricism, then why would he spend so much time and energy on constituting one's individual sensations – seems to be rather rhetorical.⁵³

2.4. The *Aufbau* and the “geistige Gegenstände”

The *Aufbau* contains passages which could be seen at first as perplexing since they do not fit into the problem-horizon of early *analytic* philosophy. One of the most outstanding examples is when Carnap considers *geistige Gegenstände* and the theory of values (§§23–24, §§150–152). Nonetheless, Carnap (§23) is definitely stating that “[f]or philosophy, the most important types of objects, outside of the physical and the psychological ones are the ‘geistige Gegenstände’ in the sense of ‘cultural’, ‘historical’, ‘sociological’ objects.” Among the *geistige Gegenstände* one finds “individual incidents and large scale occurrences, sociological groups, institutions, movements in all areas of culture, and also properties and relations of such processes and entities” (§23) and some later points Carnap considers various customs and habits (§§24, 150), the object state [Staat] (§151), technology, economics, law, politics, language, science, religion (§151).

Geistige Gegenstände form one of the highest levels of the constitution system though our knowledge of them depends on the lower levels – we know the *geistige Gegenstände* through their physical *manifestations* and *documentations* (§24): Carnap calls “documentations of a geistiger Gegenstand those permanent physical objects in which the mental life [das geistige Leben] is, as it were, solidified: products, artifacts, and documents of the mental [des Geistigen].”

One could differentiate the usual cliché about Carnap by noting that beyond the *geistige Gegenstände* he accounts for values as forming an independent level in the constitution system and thus considers also the theory of values (§152): “For aesthetic values, we take into account experiences of (aesthetic) pleasure or other attitudes in the appreciation of art, experiences of artistic creation, etc. The particular nature of the value experiences of the different value types is investigated by the phenomenology of values [...]” In order

53 See Friedman, *Reconsidering...*, 92.

to understand aesthetic values and experiences Carnap's examples are ethical ones which are connected to the feeling of obligation and responsibility. To account for the individual character and structure of the value-experiences – on the base of value sensations [Wertgefühl] – one has to turn to phenomenological investigations (§152).

After the phenomenological investigations are done, the results could be integrated into the system of the *Aufbau*. Carnap, in fact, did not spend more time on these questions since, in the *Aufbau*, he only sketches his system and theory and as we move along between the different levels his expositions get thinner. Its reason is to be found not solely in the lack of space: Carnap's motivation is philosophical. Both in the preface of the *Aufbau* and in his intellectual autobiography he claimed that the formation of a comprehensive scientific system is a task of the scientific *community* where everyone has her own task and field of research and he carried out only *his part*.⁵⁴

We cannot here give an explicit account of [the constitution of geistige Gegenstände]. The reason for this is that the psychology (or phenomenology) of the cognition of cultural items [die Psychologie (oder Phänomenologie) der Kulturerkenntnis] has not been researched and systematically described to the same degree as the psychology of perception. Thus we give only a few examples and indicate briefly how they could be generalized. These indications may suffice, since we are here mainly concerned with the possibility of constitution of geistige Gegenstände from psychological objects and since we are less concerned with the question precisely what forms these constitutions must take.⁵⁵

One could still raise the question: how did the geistige Gegenstände and the values end up in the *Aufbau*? What were the sources of Carnap when he tried to integrate them into his own system? With respect to the theory of values, one could emphasize the role of Heinrich Rickert the leading philosopher of the Baden-school of Neo-Kantianism, who tried to develop a systematic value theory. Rickert argued that values give the key to the understanding and knowing of the world and hence have a certain priority over the

54 See *Aufbau*, xvi-xvii and Carnap, "Intellectual Autobiography," 16.

55 *Aufbau*, §150.

de-individualize method of the natural sciences.⁵⁶ It is known that Rickert was one of the main teachers of Carnap in Freiburg before the First World War and so – next to Bauch and Natorp – in the Neo-Kantian tradition Rickert had the biggest effect on Carnap's thought from *this* respect.

Regarding the notion of geistiger Gegenstand we are facing a complex situation. Carnap was influenced indirectly by Wilhelm Dilthey's approach to the *Geisteswissenschaften* [human sciences] and particularly by his empirical account. Though according to Carnap, he never dealt with the works of Dilthey at firsthand,⁵⁷ some of Dilthey's students were the teachers of Carnap and hence forwarded Dilthey's ideas to him. One such teacher at the University of Jena was Herman Nohl and Carnap remembered him with "great enthusiasm" in his intellectual autobiography.⁵⁸ Christian Damböck connects the idea to Dilthey that we have to access the geistige Gegenstände from a posteriori experiential base (by contrast to the a priori approaches of Kant and Hegel).⁵⁹ As Dilthey formulated it: "All science is experiential; but all experiences must be related back to and derives its validity from the conditions and context of consciousness in which it arises, i.e., the totality of our nature."⁶⁰

56 After all only the first volume of Rickert's purported system was published, see Heinrich Rickert, *System der Philosophie* (Tübingen, 1921). About the comparison of Rickert and Carnap see Thomas Mormann, "Werte bei Carnap." *Zeitschrift für philosophische Forschung* 62 (2): 169–189. Carus argues against the overemphasizing of the similarities between Rickert and Carnap. Carus, *Carnap and Twentieth-Century Thought...*, 106–108.

57 See Carnap's letter to Wilhelm Flitner (ASP RC 102-28-07) from the 11th of December, 1968.

58 See Carnap, "Intellectual Autobiography," 4. Cf. with the unpublished version of the autobiography, 1957, UCLA, Box 2, CM3, MA-3, pp. B3-4.

59 In his article Damböck gives a detailed exposition of Dilthey's special empiricism and its effect on Carnap. Christian Damböck, "Rudolf Carnap and Wilhelm Dilthey: 'German' Empiricism in the *Aufbau*," in *Rudolf Carnap and the Legacy of Logical Empiricism*, edited by Richard Creath, Dordrecht: Springer, 2012), 67–88. Gabriel also contains many relevant discussions about Carnap's time in Jena, his connection to romanticism and the ideas of Dilthey. Gottfried Gabriel, "Introduction: Carnap Brought Home," in *Carnap Brought Home – The View from Jena*, edited by Steve Awodey, Carsten Klein (Open Court, 2004), 3–23.

60 Wilhelm Dilthey, *Introduction to the Human Sciences. Selected Works, Volume 1*, Edited by Rudolf A. Makkreel and Frithjof Rodi (Princeton University Press,

Carnap showed in the first detailed part of the *Aufbau* how we can constitute the physical objects from our personal stream of total experiences. As long as the geistige Gegenstände could be constituted and grasped through the mediation of physical objects,⁶¹ the Geisteswissenschaften would be in a position to account for the various irrational (or better: arational and atheoretical) configurations of experiences, i.e. for the different worldviews [Weltanschauungen] which are *documented through their objectual-physical objectivation*. The geistige Gegenstände appears to us in two similar ways: (i) on the one hand they are *manifested temporarily* in (broadly taken) physical objects (for example, the lifting of a hat manifests the gesture of greetings), and on the other hand (ii) they are *documented permanently* by material objects (for example the main building of the Dessau Bauhaus documents some trends and styles of the artistic movement). Both the lifting of the hat and the building of the Bauhaus are physical objects, thus, we know the geistige Gegenstände “behind them” through the mediation of *physical objects*, i.e. in a *posterior* way.

This special empiricist approach shows in itself the role of Dilthey⁶² but we can be more specific. Dilthey took the range of the Geisteswissenschaften quite broadly: the object of the Geisteswissenschaften is the “socio-historical reality.”⁶³ Among the Geisteswis-

1883/1989), 50.

61 At this point – contrary to the received view – one should not search for the origins of the radical and contemporary physicalism. Neurath, for example, made a distinction between physicalism [Physikalismus] and the physicalist [physikalistisch] approach. The former is a narrow physical approach (based on current mechanical and electro dynamical descriptions) while the latter operates only with *spatiotemporal* descriptions. See Otto Neurath, “Sociology in the framework of physicalism,” in *Otto Neurath: Philosophical Papers 1913–1946*, edited by Robert S. Cohen and Marie Neurath (D. Reidel Publishing, 1931/1983), 58–90. Neurath 1931/1983, 61. In this sense the codifications of the geistige Gegenstände (language, buildings, paintings etc.) could be grasped in a physicalist language.

62 Damböck considers the case of a special “German empiricism” and shows convincingly a line on which both Dilthey and Carnap could be placed. Christian Damböck, *Das empirische Erbe des deutschen Idealismus. Mit Einzelstudien zu Wilhelm Dilthey, Hermann Cohen und Rudolf Carnap* (Dordrecht: Springer, forthcoming).

63 Dilthey, *Introduction...*, 56.

senschaften, one finds anthropology, political economy, history, philology, aesthetic, philosophy etc. What is more important for us now is that according to Dilthey, even a certain version of psychology is to be accounted for in the Geisteswissenschaften: "The simplest results which an analysis of socio-historical reality is able to attain are found in psychology. For that reason, *psychology is the first and most fundamental of the particular human sciences*. Accordingly, its truths constitute the basis of the further formation of the human sciences."⁶⁴

By contrast, Rickert claimed that the non-natural-sciences are to be contrasted not with the Geisteswissenschaften but with the *Kulturwissenschaften* [cultural sciences]:

Those who do empirical research have started to realize that – contrary to the philosophers' mainstream belief – the term 'Geisteswissenschaften' is insufficient to characterize each and every types of non-natural-scientific sciences. And I am of the opinion, indeed, that those attempts of categorization which are based on the opposition between nature and mind [Geist] [...] are not able to understand the *real existing* differences between the empirical sciences, which would be crucial in this respect. [...]⁶⁵

For Rickert, however, the debate is not just about terminology. Among the *Kulturwissenschaften* psychology does not play a significant role like in the Geisteswissenschaften: the notion of *Kulturwissenschaft* "includes every objects of religious studies, jurisprudence, history, philology, national economics etc., so the objects of all kind of 'Geisteswissenschaften' except psychology [...]"⁶⁶ Rickert argues as follows: though the human Geist and psychic [seelische] processes indeed have an important role in demarcating the non-natu-

64 Dilthey, *Introduction...*, 84. Italics added.

65 Heinrich Rickert, *Kulturwissenschaft und Naturwissenschaft* (Tübingen: Verlag von J.C.B. Mohr, 1899/1926), 12. My translation.

66 Rickert, *Kulturwissenschaft...*, 22. My translation. About the notions of *Kulturwissenschaft* and *Geisteswissenschaft* see Rudolf A. Makkreel, "Wilhelm Dilthey and the Neo-Kantians. On the Conceptual Distinction between *Geisteswissenschaften* and *Kulturwissenschaften*," in *Neo-Kantianism in Contemporary Philosophy*, edited by Rudolf A. Makkreel and Sebastian Luft (Bloomington: Indiana University, 2010), 253–271.

ral-sciences, “psychic life as such is also grasped as nature”.⁶⁷ As such it could not serve as a proper signpost to draw a line between the non-natural-sciences and the natural sciences; according to Rickert, we have to mobilize the notion of culture [Kultur] for this task. But “one cannot use [the notion of Geist] to *define* the notion of culture”⁶⁸ because of the former reasons and thus Rickert connects it to the idea of *values* [Werte].⁶⁹ Culture goes hand in hand with values. Agriculture in itself, for instance, does not seem to be relevant for the Geisteswissenschaften; but various and significant cultural and other values stick to it and hence agriculture is a proper field of investigation for the Kulturwissenschaften. Therefore, we have to prefer the Kulturwissenschaften over the Geisteswissenschaften.

If one takes only the English translation of the *Aufbau* then she finds that Carnap considers only *cultural objects* and *cultural sciences*. If we supplement this remark with the fact the Carnap was a student of Rickert in Freiburg, then one is inclined to see here another proof of the Neo-Kantian influence on Carnap. Nevertheless, it is not the case. Carnap deals with the so-called cultural objects [kulturelle Gegenstände] just occasionally (§§23, 150) and solely in a broader context. Likewise, he is not dealing with the Kulturwissenschaften. The objects of the system of the *Aufbau* are the geistige Gegenstände and the Geisteswissenschaften. Considering the influence of the students of Dilthey⁷⁰ one should draw the conclusion that despite the suggestion of the English translation of the *Aufbau*, in the debate between the Kulturwissenschaften and

67 Rickert, *Kulturwissenschaft...*, 26. My translation.

68 Rickert, *Kulturwissenschaft...*, 26. My translation.

69 Rickert suggests the following definition: “The way we use the term ‘culture’ is close to its common use, i.e. we understand by it all real objects to which generally accepted *values*, or sense constructions constituted of them, are adhered; and which objects are *maintained* with regard to these values.” Rickert, *Kulturwissenschaft...*, 27–28. My translation.

70 Damböck considers a sort of a Dilthey-school with such names and themes as Herman Nohl (history of philosophy, pedagogy), Wilhlem Flitner (pedagogy), Franz Roh (aesthetic), Hans Freyer (sociology). Damböck, “Rudolf Carnap...” 67–68. About these authors see further Gabriel, “Introduction...” and Hans-Joachim Dahms, “Neue Sachlichkeit in the Architecture and Philosophy,” in *Carnap Brought Home – The View from Jena*, edited by Steve Awodey and Carsten Klein (Open Court Publishing, 2004), 357–375.

Geisteswissenschaften Carnap took the side of Dilthey against Rickert (and neo-Kantianism).⁷¹

But we have to mention another important mediator of Dilthey, namely Hans Freyer. Hans Freyer (1887–1969) was a conservative German sociologist. Though nowadays he doesn't seem to be one of the most discussed and cited authors (especially in the English-speaking world) and actually he is just forgotten, "he was perhaps the most articulate and historically self-conscious thinker associated with the movement for a 'conservative revolution' in the 1920s [...]. In the years after the First World War his status as a social theorist was acknowledged by intellectuals as diverse as Georg Simmel, Karl Mannheim, Herbert Marcuse, and Talcott Parsons."⁷²

Though there isn't any correspondence between Carnap and Freyer in Carnap's *Nachlass* and Carnap mentioned Freyer only a few times in his correspondence with others, it is known that they were good friends until around 1933 when Freyer joined the national-socialist groups.⁷³ In his *Theorie des objektiven Geistes. Eine Einleitung in die Kulturphilosophie* (*Theory of Objective Mind – Introduction to the Philosophy of Culture*, Freyer 1928/1998, first published in 1923) Freyer tried to work out his philosophy of culture [Kulturphiloso-

71 The hypotheses seems to be plausible also on the base that Carnap was aware of the mentioned debate since he read the above mentioned work of Rickert (*Kulturwissenschaft und Naturwissenschaft*) and several others. See ASP RC 025-03-05.

72 Jerry Z. Muller, *The Other God that Failed – Hans Freyer and the Deradicalization of German Conservatism* (Princeton University Press, 1987), 3. Muller's book is one of the most detailed works on Freyer's cultural, political and philosophical development in English. It also contains a comprehensive intellectual history of the early 20th century German-speaking world with a biography of Freyer. See also Elfriede Üner, *Soziologie als „geistige Bewegung“*. *Hans Freyers System der Soziologie und die „Leipziger Schule“* (Weinheim: Acta Humaniora, VCH Verlag, 1992) and Gerhard Schäfer, "Wider die Inszenierung des Vergessens," *Jahrbuch für Soziologiegeschichte* 1990, 121-175.

73 Both Freyer and Carnap participated before the First World War in the so-called *Jugendbewegung* [German Youth Movement]; in particular they were members of the group formed around Eugen Diederichs in Jena called *Serakreis*. See Carus, *Carnap and Twentieth-Century Thought...*; and Ádám Tamás Tuboly, "Carnap's Weltanschauung and the Jugendbewegung: the story of an omitted chapter," In *Integrated History and Philosophy of Science*, edited by Friedrich Stadler (Dordrecht: Springer), forthcoming.

phie] on the base of the empirically given manifestations and documentations of the geistige Gegenstände and thus he wanted to give a solid foundation for the Geisteswissenschaften.⁷⁴

In 1920, Carnap organized a scientific meeting in Buchenbach where besides him and Franz Roh the other participant was Freyer.⁷⁵ Since I was dealing in a detailed manner with the comparison of Carnap's *Aufbau* and Freyer's *Theorie* at another place,⁷⁶ I will just mention here a few things. Freyer was considering his work in a way as a counterpart of the *Aufbau* or at least with Carnap's intention in the *Aufbau* when he was forming it on the early 1920s. The contemporary philosophy and logic that Freyer is mentioning in the following paragraph is just Carnap's constitution system and his logic of relations:

The relation between the philosophy of culture and philosophy is actually one of a remarkable two-sidedness. Whoever thinks along the lines of the philosophy of culture must doubly arrange his work in the philosophical movement of the present. [...] the philosophy of culture is today merely an anticipation, [...] it works with a logic that is still not developed [...]. On the other hand, even for that reason, it may hope that its results will reach far beyond the boundaries of its own formulation of the problem, and that its work is of that kind of power from which the whole of philosophy can be advanced.⁷⁷

The *Aufbau* shows many more similar considerations and ideas that surfaced also in *Theorie*: like Carnap, Freyer was too working in a Kant-inspired transcendental framework when he asked the question: "what makes the experience of the Geisteswissenschaften possible in the first place?"⁷⁸ Freyer's answer was based on struc-

74 Carnap's example about the lifting of the hat (§24) as a documentation of a geistiger Gegenstand came from Freyer. Hans Freyer, *Theory of Objective Mind – Introduction to the Philosophy of Culture* (Ohio University Press, 1928/1998), 55; 66. Carnap is referring to Freyer in the *Aufbau* quite enthusiastically (§§12, 19, 56).

75 About the Buchenbach-meeting – which was motivated by the ideas of Ostwald about the "system of the sciences" – see Dahms, "Carnap's Early..."

76 See Ádám Tamás Tuboly, "From the Jugendbewegung to the *Aufbau* – Carnap relation to Hans Freyer." Forthcoming manuscript.

77 Freyer, *Theory of...*, 14. See also page 10.

78 Freyer, *Theory of...*, 5. See also page 1.

turalism (just like Carnap's answer to the objectivity of knowledge was based on structuralism)⁷⁹ and in fact, he claimed that if one is to know a geistiger Gegenstand then two minds are facing each other (the knower and the one made the object) and the condition of understanding is made possible by the identity of the (transcendental) structures of minds. Furthermore, Freyer is working with a multilayered theory of knowledge and also his layers in the case of the geistige Gegenstände are similar to that of the later *Aufbau*.

The list could be continued; however, it seems to be plausible that, influenced by Dilthey, Freyer investigated the empirical access to the objects of the Geisteswissenschaften and he did not talk about the Neo-Kantians cultural sciences. But besides the comprehensive similarities between the *Aufbau* and the *Theorie* we know from the correspondence of Franz Roh and Wilhelm Flitner that Carnap and Freyer were considering a common project:

It's a pity that the expected program which C[arnap] were to (or had) reconcile with FREYER didn't work out after all. From the 3 big complexes in which we were involved to which shall we turn now? To politics? To Ethics? To the system of sciences? Freyer mentioned in a letter that we shall appreciate ethics and the value of science.⁸⁰

In the light of their common interests and goals we could reconstruct the happenings of the 1920s as follows: though Carnap and Freyer did not work together each of them has done his part of the project separately in the *Theorie* and in the *Aufbau*.

79 On Carnap's structuralism and its comprehensive effects and role in the *Aufbau*, see Christian Damböck, "Beyond Pure Structure: Hermeneutic Objectivity in Carnap's Aufbau." Forthcoming manuscript.

80 Quoted by Priem and Glaser. Karin Priem and Edith Glaser, "'Hochverehrter Herr Professor!' – 'Sehr geehrter Herr Kollege!'" Rekonstruktion von Erziehungswissenschaft durch Biographik am Beispiel der Korrespondenzen Eduard Sprangers und Wilhelm Flitners," *Zeitschrift für Erziehungswissenschaft* 2002, 1: 171. My translation.

III. Summary

According to the usual story about Carnap, though his *Aufbau* was an important product of early analytic philosophy – due to his reductive empiricist tendencies – it showed the characteristic features of a failure. We have discussed several reasons to undermine this picture and consider the *Aufbau* in its original and much broader context.

If one characterizes Carnap's work only in the framework of the received view she will miss something very important: namely its relation to the typical non-analytic, continental movements, such as Neo-Kantianism, phenomenology, the *Geisteswissenschaften* etc.

One final remark. If one aims at reconstructing the history of philosophy in the twentieth century, then in order to account for the development of both analytic philosophy and continental philosophy, Carnap's *Aufbau* seems to be a viable starting point since the continental roots of the *Aufbau* go much deeper than they are usually thought and this fact forces us to revise our frameworks and narratives.

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