Christian Damböck (ed.): Influences on the "Aufbau". Vienna Circle Institute Yearbook, Vol. 18. Berlin: Springer 2016.

In July 2013, Christian Damböck, the editor of the present volume, organized a conference at the Munich Center for Mathematical Philosophy, assessing the various influences on Carnap's early masterpiece, the *Logical Structure of the World* (or, as it is usually referred to in the literature, *Aufbau*). The 18th volume of the Vienna Circle Institute Yearbooks is devoted to the materials presented at the conference. (Though the volume contains, as usual, two review essays, many reviews and the latest Vienna Circle Lecture, delivered by Michael Beaney about "Susan Stebbing and the Early Reception of Logical Empiricism in Britain", I will focus only on the conference papers about the *Aufbau*.)

The recent literature on Carnap and especially on his *Aufbau* proved that this early masterpiece of so-called analytic philosophy contains much more than just a simple empirico-reductive and phenomenalist approach to the external world and the mind that structures it. This view was typically upheld by Quine, Goodman, but even by such close associate of logical empiricism as Ayer. Though the articles of the volume often mention this classical, or received view of the *Aufbau*, they quickly bypass it – demolishing the old view is a task that is already done by now. Henceforth the aim of the volume is to construe *new readings*, or better, to reveal the original *contexts* of and *influences* on the *Aufbau*. This duality is also mirrored by the papers.

Those articles that belong to the second group examine the *influences on* the *Aufbau*, be them either individual authors, or movements, or problem-settings. Thomas Uebel, for instance, dealt with the possible influence of Otto Neurath. Though it is known that Neurath reviewed Carnap's book right after its publication and they had some (in Neurath's eyes) sharp debate about the nature of protocol-sentences, it is less discussed whether Neurath, one of the "new colleagues" (51), had any influence on the formation of the *Aufbau*. Uebel built his case with great attention to the details of the Carnap archives and showed that Neurath had problems with the book from two angles: he found the *Aufbau*'s individualistic overtones troubling from his collectivist, social epistemologist perspective, and expected more work on the physicalist promises of the work. Uebel argued, however, that "Neurath's physicalist sympathies cannot have influenced the physicalism of the Aufbau because there was no physicalism – fully-fledged or virtual – in it" (66).

Matthias Neuber's shorter contribution on Moritz Schlick's influence and role is a strange piece. On the one hand, Neuber did not provide the item numbers of the archive materials, but what is more important is that he discussed the actual topic under some very general headings and he was more focused on Schlick than on Carnap.

Another individual influence (though this time not personally but through books) is Wilhelm Ostwald's which was considered by Hans-Joachim Dahms. Though Ostwald did not surface many times in the *Aufbau* (but see the pages 179-182 of Dahms paper), his influence is detectable quite well on the base of archive materials from the period between the 1910s and 1928. Carnap organized a less known conference in August 1920 with his friends from the German Youth Movement (the pedagogic Wilhelm Flitner, art-historian Franz Roh, and sociologist Hans Freyer) whose main topic was the 'system of sciences' propagated earlier by Ostwald. Dahms analyzed and contextualized this meeting with its influence on the *Aufbau*'s general problem-formation and solutions. Clinton Tolley and Paul Ziche considered, respectively, not the role of individual figures on Carnap's early thought, but more general lines of influences. Ziche, for example, argued that in the case of Carnap, we should not think of 'disjunctive' philosophical schools and movement, but of ideas, philosophical and scientific problems *per se*. If we take Carnap as a scholar who looked for various and wholly *different* perspectives and methods for dealing with a given difficulty, then "this implies that we should free ourselves from feeling too greatly surprised when seeing Carnap in peaceful and fruitful interaction with apparently divergent movements" (79). Ziche's example is the problem of 'ordering' and the notion of 'order'; he ably contextualized Carnap's procedure in the *Aufbau* with the ideals of Theodore Ziehen, Hans Driesch and Walter Dubislav. The same methodological concerns are true of Tolley also, though he focused on Kant, the neo-Kantians (especially Paul Natorp), Gottlob Frege, Edmund Husserl and Bertrand Russell: what connects them is their continuous interest in the *nature of logic*. One of Tolley's major points is that the early Carnap (of and before the *Aufbau* and unlike, e.g., the Carnap of *Meaning and Necessity* from 1947) was much closer to Russell than to Frege.

Most of the remaining articles could be subsumed under the general heading of "new readings of the *Aufbau*" since all of them either criticize a particular 'new reading' or themselves provide a new reading and interpretation of the *Aufbau*. One of the most important revolutionary approaches to Carnap's *magnum opus* was the Kantian/neo-Kantian rendering of it. Alan Richardson rightly emphasized in his contribution that the neo-Kantian readings of *Aufbau* do not claim that Carnap was a single-minded neo-Kantian of any sort, but that "[you] cannot understand some of the specific philosophical moves, attitudes, or projects in Carnap's early philosophy [...] if you do not take into account Carnap's engagement in the 1910s and 1920s with neo-Kantianism" (1). The real contribution of Richardson is, however, that he called our attention to the German context of the external-world program and discussed the role that the philosopher/psychologist Karl Gerhard could have played in Carnap's *original German* setting of the problem.

In his contribution, André Carus did not argue for a wholly new reading of the *Aufbau* (he already did that in his own book) but tries to undermine a different and radical interpretation of the *Aufbau*, namely the Husserlian. Carus used many archive materials as evidences to show that though there were indeed many connections between Carnap and Husserl (both philosophical and personal), Carnap's early works could not be rendered as "Husserlian" in character. He showed that Husserl and phenomenology was just one feature of the *Aufbau* and actually Carnap "effected a quite original synthesis between [Husserl and Russell] – while rejecting *both* their larger philosophical projects" (138).

The final two articles from this group are Thomas Mormann's and Mikko Leinonen's papers. Mormann put forward a very interesting and unexpected theses, i.e. that "the original core of the *Aufbau* project rested on a problem that had haunted German philosophy since the end of the nineteenth century. In terms fashionable at the time, the problem was characterized as a polarity between *Leben* and *Geist (Life and Spirit)*" (115). Mormann considered highly diversified approaches to philosophy and to the mentioned gap between *Leben* and *Geist* and showed that Carnap forged all of them into the *Aufbau*. Finally in order to reconstruct Carnap's unified account of the problem, Mormann took up the influence of Rickert and his theory of values which is represented by the fact that values as "cultural object[s] [...] originally belonged to the realm of objects constituted in the *Aufbau*" (131). Actually Mormann seems to argue for a certain new reading of the *Aufbau* from the perspective of the 'cultural' or 'human sciences' [Geisteswissenschaften]. Though Carnap's work evidently mixes many more problems and approaches from logic, mathematics and the natural sciences, Mormann's new reading is specifically motivated given that the Carnap, during his most intensive formative years, participated in the so-called German Youth Movement where he acquired certain sensitivity to the problems of human and social sciences.

Though Mormann made his case quite solid, Mikko Leinonen starts from the considerations of Mormann (and relies on his various papers many times) and argues also for a Rickertian reading of Aufbau. It is not just that Leinonen's paper contains many repetitions but his language is a bit too strong; the author aims to "demonstrate" Rickert's definite influence on Aufbau taking the "notion of demonstration in the meaning of conclusive evidence or proof" (222, fn. 27). Though the thesis of the paper is quite similar to that of Mormann's, Leinonen articulates it in historically synthetic manner: "[Rickert's] System der Philosophie touched upon the issue of how to reconcile a conceptual system 'constructing' approach in philosophy (that was in line with an influential Kantian academic establishment) with life-philosophers' (and particularly Nietzsche's) antisystematicism" (222), the latter two having fundamental effects on the young Carnap. Leinonen's work, however, suffers from some lesser problems. Besides Rickert, he dealt with the role and influence of the neo-Kantian Hans Vaihinger, who in his major work, Die Philosophie des Als Ob (1911), formulated such thoughts about fictions, chaos and ordering that surfaced later in Carnap's first version of what become later the Aufbau. However, almost exactly the same thoughts could be found in Wilhelm Ostwald's Grundriss der Naturphilosophie (1908), which was known for Carnap, so one could suspect here again the influence of either Ostwald (as argued by Dahms) or a certain general German trend (argued by Ziche and Richardson). Leinonen based his arguments often on the concept-usage of Carnap and devoted only minor footnotes to the actual personal connection between Carnap and Rickert. It is known that Carnap was a student of Rickert in Freiburg and mentioned him frequently in his diaries; so analyzing those records could have strengthen Leinonen's case.

Finally, the author claimed that Rickert's influence was long-standing after all, since Carnap's "Empiricism, Semantics and Ontology" (1950) could be read from the perspective of Rickert's (227-229). On the one hand, Leinonen stated that Carnap's "'linguistic frameworks' derive from a 'procedure' of 'construction' that consists of imposing 'new rules' that are meant to replace the old ones" (229) which indirectly goes back to 'a will to systematize' originating from Nietzsche and worked out by Rickert. The idea that, as humans, we just have the abilities and *rights* to rebuild (Aufbau) our entire (cultural, social, political etc.) world could equally come from Carnap's times in the German Youth Movement, so some further reasoning is needed to confirm either option.

On the other hand, the author declared that Carnap's article was introduced into the "dispute between Carnap and W. V. O. Quine over the use of abstract objects in semantics" (227). Though Quine was indeed an important figure, it is known from Carnap's correspondence that Otto Neurath and Ernest Nagel also disliked his approach to semantics and abstract entities and Carnap worked on his neutral conception – to accept and use his methods – for years in order to save his work-fellow relation to Neurath and Nagel.

The last two pieces about the influences on the *Aufbau* was written by Thomas Ryckman and Sébastien Gandon. Actually they are not about influences: their heroes are Hermann Weyl and Norbert Wiener respectively and neither of them influenced Carnap during his time of the

*Aufbau*. Rather, Ryckman and Gandon discussed those parallels, texts and contexts which show that how Carnap's approach could have been reconciled or collated with some similar, back then contemporary approaches. From these two articles, however, the reader learns much more from the earlier philosophical atmosphere both in Germany and the United States, than about Carnap. Though the volume contains some typos, a somewhat strange bibliographical system, and in some cases the page numbers are missing from the references, the editorial work merits a favorable review since the collection of articles embraced a huge spectrum from the missing parts of our understanding of Carnap's *Aufbau*. Granting that, one could raise the question what we shall do now? It is not the case that we have enough of Carnap's *magnum opus* and thus we shall move on to others?

Well, it is true that we now possess quite an extensive knowledge of it but there are still many things to explore: for example the effect of the German Youth Movement, the role of experimental psychology (which is mentioned frequently in Carnap's diaries from that time), the influence of the neo-Kantian Broder Christiansen who was a daily discussion-partner for Carnap about the ideal of constitution and arts. On the other hand, the *Aufbau* is indeed a huge melting pot (as it could be seen from this volume too) thus it provides many ways to reveal the philosophies and ideals of the Vienna Circle and all of the associates from the 1920s and 1930s. And the influence of the *Aufbau* is another matter. There is still work to be done.

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