

Workshop „Influences on the *Aufbau*“ July 1-3, 2013

LMU Munich, MCMP - Abstracts

Venue: Evangelische Studentengemeinde, Friedrichstraße 25, 80801 München

Andre Carus (Hegeler Institute): “Carnap and Phenomenology: What Happened in 1924?”

Abstract: The sketch of the *Aufbau* system in "Vom Chaos zur Wirklichkeit" (1922) employs phenomenology to describe the system basis, as do other writings before 1924. But in January 1925, we find a new principle of "Überwindung der Subjektivität" and a new emphasis on "Einheit des Gegenstandsbereichs." Russell's "construction principle" becomes the motto of the published book. The earlier approach is explicitly rejected. Why this radical change? This question is discussed here on the basis of evidence from Carnap's papers, and a somewhat unexpected conclusion is reached.

Hans-Joachim Dahms (Wien): “Rudolf Carnap und Wilhelm Ostwald“

Abstract: When Rudolf Carnap started work on his dissertation *Der Raum* in Summer 1920 he also hosted a conference with some of his Jena friends in his Buchenbach home about „a system of the sciences“. Carnap proposed as starting point for that discussion a scheme and ideas developed by Wilhelm Ostwald (1853-1932), the nobel-price winning chemist (1909) and monistic philosopher. Ostwald is also mentioned and discussed in the *Aufbau*. What Carnap might have attracted to Ostwald's work, are the following items of common interest:

- the construction of international artificial languages for everyday use (like esperanto), but also for scientific purposes,
- monism and the unity of the sciences,
- theories of colour, and last but not least:
- ethics.

After a brief discussion of these points I will conclude with a tentative answer to the question why Ostwald's influence on Carnap seems to have diminished in the decade since the Buchenbach conference.

Christian Damböck (Wien): “The Notions of the Empirical and Objectivity in 19th Century German Philosophy and their Role for the *Aufbau*“

Abstract: This paper compares Carnap's empiricist and objectivist conception from the *Aufbau* with a certain family of accounts of the empirical and objectivity that had been emerged in 19th Century Germany. Although these accounts were marginalized at the beginning of the 20th Century there were traces of this German empiricist (and objectivist) tradition to be found both in the philosophy of the Dilthey-school and in neo-Kantianism. Therefore, we try to argue first that Dilthey and the neo-Kantians (or at least some of them) have been sympathetic to a certain kind of empiricist and objectivist reasoning, and second that Carnap's own empiricist and objectivist conception most probably has been influenced by these German empiricists (and objectivists).

Michael Friedman (Stanford): “From Intuition to Tolerance in Carnap's Philosophy of Mathematics“

Abstract: I plan to discuss the evolution of Carnap's views on arithmetic and geometry from *Der Raum*, through the *Aufbau* period, to Logical Syntax and the semantic period. I will concentrate on the way in which he consistently distinguished the two cases -- where geometry, in *Der Raum*, is explicitly tied to spatial intuition, and then, even though it remains distinguished from arithmetic, its ties to spatial intuition become empirical rather than a priori. The character of Carnap's generally tolerant attitude towards philosophical disputes in the foundations of mathematics thereby changes as well. Carnap's attitude

towards intuition in the arithmetical case, finally, becomes clarified in his exchange with E. W. Beth in the Schilpp volume -- and this clarifies his application of the principle of tolerance in this case as well.

Sebastien Gandon (Clermont): “Wiener and Carnap: a Missed Opportunity?”

Abstract: In 1913, Norbert Wiener, then a young (19 years old) prodigy, went in Cambridge to work with Russell. Wiener was very impressed by Russell’s constructionalist program, and, from 1914 to 1922, he published four papers (one is more than 100 pages long) extending Russell’s project. My talk’s first aim is to present these little known researches. My second goal is to draw a comparison between Carnap’s and Wiener’s reception of Russell.

Thomas Meier (München): “Discussing the Influences on Carnap’s Structuralism in the *Aufbau*”

I present an analysis of the different influences on Carnap’s structuralism in the *Aufbau*. First, I show how Hilbert’s notion of *implicit definition* from his axiomatization of Euclidean geometry (Hilbert, 1899) had an influence on Carnap’s development of his notion of *purely structural description*. As one further point, I will also discuss Neo-Kantian influences on Carnap’s structuralism. This mainly concerns Carnap’s position of what has been identified as a form of *epistemic structural realism* in the modern literature (see Frigg & Votsis, 2011). I will argue that Carnap’s proposal for individuating certain relations as *founded relations* in §154 is of contemporary relevance for actual debates on the so-called Newman-Objection. The Neo-Kantian influence on Carnap’s epistemology becomes clearer if we consider his purely relational system of knowledge, in which objects are subordinate to relations, to the *Grundrelationen*. For Carnap, a Kantian *thing-in-itself* as such would not be knowable but through its relations.

Thomas Mormann (San Sebastian): “Reconstructing Influences: the Case of Southwest Neo-Kantianism and *Lebensphilosophie* in Carnap’s *Aufbau*”

Abstract: Once upon a time, the *Aufbau* was succinctly described as an attempt “to account for the external world as a logical construct of sense-data... .” Consequently, the most important influence on the *Aufbau* could be precisely named as “Russell”. These idyllic times have long passed. A comprehensive interpretation of the *Aufbau* has turned out to be a difficult task that has to take into account many, and sometimes rather turbid, sources.

My thesis is that at the origin of the *Aufbau* project stood a problem that haunted German philosophy since the end of the 19th century at the latest. Bluntly, it may be expressed as the conflict between “Leben” and “Geist”. I want to show that there exists striking similarities between the attempts of how Rickerts *System der Philosophie* (1921) and Carnap’s (unpublished ms.) *Vom Chaos zur Wirklichkeit* (1922) (“the germ of the constitution theory”) aimed to cope with this problem.

Matthias Neuber (Tübingen): “The *Aufbau* and the Early Schlick”

Abstract: Schlick’s influence on Carnap’s *Aufbau* will be considered under the aspect of Schlick’s early ‘critical realism.’ It will be shown that both Carnap’s structuralism and his distinction between the ‘metaphysical’ and the ‘empirical’ conception of reality can be traced back to Schlick’s discussion of the realism issue in his early *Allgemeine Erkenntnislehre* (1918, 1925). By way of conclusion, I shall briefly discuss Herbert Feigl’s contention that the later (Viennese) Schlick converted—influenced by Carnap’s *Aufbau*—from his early critical realism to ‘phenomenalistic positivism.’

Alan Richardson (Vancouver): “The Mathematical Core of the External World Problem: Carnap's Construction of the External World and Karl Gerhards's 'Der mathematische Kern der Aussenweltshypothese’”

Abstract: Carnap, in his "Intellectual Autobiography," tells the story of reading in 1921 Bertrand Russell's book, *Our Knowledge of the External World*. In this anecdote he calls Russell "the strongest influence" on his "philosophical thinking in general" during the period of writing the *Aufbau*. But, while the methodological lessons of Russell loomed large in Carnap's mind, the actual techniques developed in the *Aufbau* for constructing the external world differ considerably from Russell's own. Thus, noting Russell's influence does not take us very far in figuring out what the external world problem was for Carnap or what resources might be brought in to solve it. In this essay, I compare some of the constructive procedures of the *Aufbau* to procedures developed in Karl Gerhards's paper "Der mathematische Kern der Aussenweltshypothese" of 1922. Not only does Carnap refer to this paper in the crucial sections of the *Aufbau* where the construction of the external world is sketched, but this paper was precirculated and discussed at the 1923 Erlangen Conference at which Carnap and Reichenbach met and which Carnap subsequently called "the small but significant initial step in the movement of a scientific philosophy in Germany." Not only are some of Gerhards's constructive procedures and resources more closely related to Carnap's than are Russell's, but also Gerhards places his own work in a context created by the work of Helmholtz and Mach. The point of this endeavor is to enrich the resources we bring to bear in thinking about Carnap's philosophical project in the *Aufbau*.

Guillermo E. Rosado Haddock (Costa Rica): “The Old Husserl and the Young Carnap”

Abstract: In his 'Intellectual Autobiography' Carnap barely refers to Husserl and not once with reference to his own work. He mentions Kant and a pair of Neo-Kantians as the main philosophical influences in *Der Raum*, and Mach, Russell and the Gestalt psychologists as main influences in *Der logische Aufbau der Welt*. Moreover, he stresses that he heard three lecture courses by Frege. On the other hand, there are some signs in Husserl's late correspondence not only of having known Carnap, but also of a lack of sympathy for him. The present paper addresses this mysterious relation and the fact that Husserl was a decisive influence precisely in those two writings of Carnap.

Thomas Ryckman (Stanford): “What Carnap Might Have Learned from Weyl”

Abstract: There are easily discernible traces of the influence of Hermann Weyl in the writings of Carnap in the early to mid- 1920s. It is somewhat more difficult to find any palpable influence of Weyl in the *Aufbau*. On the other hand, Weyl's 1926 *Philosophie der Mathematik und Naturwissenschaften* is the sole work singled out in *Aufbau's* Bibliography as "especially suitable for study of problems connected with construction theory" in both the "logical" and the "epistemological" categories. I shall argue that, in the crucial *Aufbau* passage (§176) "demonstrating" the non-constructability of the reality (as mind-transcendent) concept, Carnap may have had §17 of Weyl's 1926 book very much in mind.

Elena Tatievskaya (Augsburg): “Gätschenberger on the ‘Given’ and Carnap's *Aufbau*”

In his *Aufbau* Carnap rejects Gätschenberger's (1920) statement that the pure language of the "given" is impossible. Gätschenberger who represents cognition as ordering reality by means of symbolizing holds an experience ("Erlebnis") to be a natural symbol which posits some object identifiable on the basis of the effects of the experience and in particular actions induced by it. Carnap treats the given as an object and ordering reality as constructing things. I argue that Carnap's concept of the given can be considered as a solution of some problems of Gätschenberger's theory which explains the forming function of experience through reference to the form and constituents of the object cognized which in their turn are defined by other means of symbolizing.

Iulian Toader (Bucharest): “Quasianalytic Individuation”

Abstract: Carnap maintained that, unlike mathematics, the empirical sciences must individuate their objects, and that they can (and should) do so via univocal systems of structural definite descriptions. In this paper, I evaluate Carnap's strategies for univocality, against the Southwest German neo-Kantian demand for a “logic of individuality”, but also against the challenge of Weylean skepticism – the view that objectivity and understanding are opposite ideals of science.

Clinton Tolley (LA): “The Development of Carnap's Views on Logic up to the *Aufbau*”

Abstract: I will identify key components of Carnap's early conception of logic, as it develops in the period leading up to the *Aufbau*, looking especially at *Der Raum* and also *Abriss der Logistik*. I will also situate the development of Carnap's views within the context of the main influences upon his thinking at the time. Finally, I will identify points of contrast between his views in this period and his views after the *Aufbau*.

Thomas Uebel (Manchester): “Neurath and Carnap's *Aufbau*”

Abstract: In his very prompt review of Carnap's *Aufbau*, Neurath was both highly appreciative of Carnap's achievements there and but also critical of some of its features. Neurath, of course, is reported to have been one of the readers of the typescript of an earlier version of that book that circulated amongst members of Schlick's discussion group. This talk will consider the question whether Neurath had any influence on the final version and what form this influence may have taken.

Paul Ziche (Utrecht): “Theories of Order in Carnap's *Aufbau*”

Abstract: "Order" is a key term in debates in, and between, fields such as logic, philosophy of mathematics, theoretical biology and philosophy of science around 1900. In § 3 of the "*Aufbau*", Carnap refers affirmatively to a number of relevant authors: Whitehead and Russell, Driesch, Ostwald, Husserl, and many more. This list already indicates how broad and, from today's point of view, internally heterogeneous the discourse on order has been in this period. This paper will motivate why the notion of "order" played such a crucial role around 1900, and what its strategic position in those debates has been: "order" was conceived of as an ultimately abstract and general concept that could, nevertheless, be given content via, among others, mathematical and logical methods, or within fields such as biology. On the other hand, these diverse lines of influence also shaped the status of the field of logic itself. In a second step, it will be asked how Carnap views this discourse on order, and how he reacts to it, and to the broader ideas that form the strategic background of the notion of "order".