Carnap's Ideal of Explication and Naturalism, edited by Pierre Wagner, Palgrave Macmillan, 2012, pp. 263 + xii

This book came out in the series *History of Analytic Philosophy*, edited by Michael Beaney, whose main aim is "to create a venue for work on the history of analytic philosophy, consolidating the area as a major field of philosophy and promoting further research and debate" (p. vii). The main focus of the book is on Carnap's method of explication, considered to be the core of his philosophical methodology, and on the contemporary debate between conceptual engineering and naturalism (p. 2). The method of explication is analyzed from different perspectives in the fifteen chapters of the book, which are organized in three parts, as follows: Historical Situation of Carnap's Ideal of Explication; Carnap's Ideal of Explication: Critical Assessments and Examples; The Contemporary Debate. Nevertheless, some topics overlap and, therefore, as the editor emphasizes, this division in three parts "should be regarded as providing a possible guideline to the reader" rather than a precise classification (p. 4). The book opens with the series editor's foreword, continues with the book editor's introduction, and ends with two useful subject index and name index.

The first part of the book begins with Alan Richardson's article Carnap's Place in Analytic Philosophy and Philosophy of Science, which points out a tension between the accounts for the significance of Carnap's work in philosophy of science and in analytic philosophy. According to the interpretation that the author develops, Carnap is a sort of philosophical engineer, whose interest is in "a particular form of engineering or applied science – in which the primary focus is on the place of material and conceptual technologies in the production of scientific knowledge" (p. 20). In the second article, Carnap, Pseudo-Problems, and Ontological Questions (translated by Franziska Tropschung), Gottfried Gabriel argues that there is a similarity between Carnap's and Heidegger's views regarding the external ontological questions, and this similarity is due to the fact that they "share a common origin in neo-Kantianism, Lebensphilosophie and phenomenology" (p. 23). In order to make this similarity clear, the author introduces "the third man", Oskar Becker, whose works provide evidence in this respect. As a consequence, in the context of discovery, "it is high time that analytic philosophy becomes aware of its continental roots" (p. 30). Juliette Floyd's article Wittgenstein, Carnap, and Turing: Contrasting Notions of Analysis,

considers and explains some similarities between Turing's conception of explication and Carnap's ideal of explication, on the one side, and between Turing's conception of explication and late Wittgenstein's philosophical methodology. Turing's explication of the notion of "effectively calculable" using as explicans the notion of a machine seems to be an exemplary instance of Carnap's method. However, in contradistinction with Carnap, and in accordance with late Wittgenstein, Turing's explanation clarifies the idea of a formal system "by picturing or modeling its use"; he offers "a language game: a simplified model or snapshot of a portion of human activity in language" (p. 39). In the fourth article, Rudolf Carnap and the Legacy of Aufklärung, following Andre Carus' ideas from the book Carnap and Twentieth-Century Thought: Explication as Enlightenment (2007), Jacques Bouveresse describes Carnap's philosophy as a philosophy of Enlightenment, in which the problems of scientific philosophy and the problems of practical life are not disentangled. For instance, as the author emphasizes, we should not forget "that the needs of affectivity in philosophy, can also by satisfied by the search of clarity, precision, soberness, rational discussion and methodical cooperation between individuals" (pp. 48-49). In the fifth article, Carnap's Boundless Ocean of Unlimited Possibilities: Between Enlightenment and Romanticism, Thomas Mormann, in accordance with Carus's idea of Carnap "as the founding father of a new philosophy of enlightenment based on his notion of explication" (p. 63), argues that in addition to this image of Carnap's novel vision of philosophy there are also other features that can be labeled with the term "romanticism", in particular, Lebensphilosophie and Nietzsche's philosophy. However, the author emphasizes, Carnap's attempt to reconcile the enlightenment tradition with romanticism led him to "an uneasy compromise between Geist und Leben that rendered his enlightenment restricted to the formal and the theoretical" (p. 77).

The second part of the book opens with Wolfgang Kienzler's article, Carnap's Conception of Philosophy. The author presents Carnap's conception(s) of philosophy historically, describing the main features of his vision by looking at the work he "carried out during the different phases of his career" (p. 82). For instance, in Carnap's early conception, philosophy starts by sorting out conceptual ambiguities with the aim of setting up a formal axiomatic system: "the notion of an axiomatic system very much embodies Carnap's early ideal of philosophy" (p. 84). While the Aufbau is conceived of as "a piece of purely instrumental, non-philosophical engineering" (p. 85), in Scheinprobleme (traditional) philosophy is seen as consisting in pseudo-problems. Regarding the centrality of the method of explication, the author emphasises that this "is just another version of Carnap's general attitude that philosophy begins with work in clarification, explanation, or explication" (p. 91). The seventh article of the volume, Erich Reck's article Carnapian Explication: A Case Study and Critique, is by far the most interesting and tightly argued contribution to this volume. The first part of the article recalls the main features of Carnap's method of explication, and then, in the second part, after comparing Hempel's nomological model of explanation to Carnap's idea of explanation, other four models of explanation (causal model, unification model, formal

pragmatic model, Scriven's model or the informal pragmatic approach - as the author labels it) are shortly analyzed. The last part of the article presents a comparative critical analysis of the notions of explanation presented. In the eight article, The Bipartite Conception of Metatheory and the Dialectical Conception of Explication, Thoumas Uebel analyses and compares Vienna Circle conception of philosophy of science - the bipartite conception as he names it-, understood "as a second-order discipline comprising both logical and empirical inquiries" (p. 117) with the dialectical conception of explication that has been attributed to the later Carnap by H. Stein and A. Carus. The dialectic conception of explication, very roughly, refers to the interaction between the constructed formal languages and the natural languages in the practical context of choosing a conceptual framework. The author argues that each conception complements the other, although in different senses. Steve Awodey's article Explicating 'Analytic', presents a paradigmatic case which, probably, motivated Carnap to elaborate his conception of explication, namely, defining logical truth or analyticity, a fundamental problem "which still remains very much in need of clarification" (p. 131). The author systematically presents eight successive accounts for defining logical truth, as follows: Frege-Russell deductivism, Tautologicism, Early Syntax substitutionalism, Syntax conventionalism, Tarski-style semantics, State descriptions, (Carnap's) Late semantics and Subsequent developments - including Tarski's invariantive proposal and Awodey and H. Forssell proposal (from First-Order Logical Duality) which complements the invariantive criterion with the constraint of using continuity across domains of different size. The last article of the second part of the book, Carnap and the Semantical Explication of Analyticity, written by Philippe de Rouilhan, examines Carnap's explication of the concept of analyticity from Introduction to Semantics. The author admits that Carnap's analysis of analyticity went wrong and argues that, in contradistinction with some model theorists, this was not because he did not work with a variable domain and interpretation, but, roughly, it was due to the fact that he was not "able systematically to extract the analytic relations between descriptive constants from the semantical rules supposedly concealing them and to express these relations in the system under consideration" (p. 157).

Richard Creath's article, *Before Explication*, opens the third part of the book. The article presents the central features (method, view, stance) of Carnap's early philosophy, but its main aim is to shed light on "Carnap's later and more mature view by focusing on the character of his importantly different prior perspective" (p. 161). The author suggests that Carnap saw himself as a mediator in the Vienna Circle and the acceptance of the Principle of Tolerance was his new mediating strategy in the group, which "reconceives the nature of disagreement" (p. 172). In this later view, besides the acceptance of the Principle of Tolerance, the method of logical analysis turns in explication, and metaphysics is seen not as unintelligible but as empirically meaningless. Pierre Wagner, in his article *Natural Languages*, *Formal Languages*, *and Explication*, analyses "the particular form of the linguistic frameworks Carnap introduced and examined in a large number of his publications after the adoption of the principle of tolerance" (p. 176). The

problem is how these frameworks, i.e., systems of syntactic or sematic rules, relate with the language of science and with the natural languages. The author critically examines T. Ricketts interpretation according to which languages in use are instances of calculi or semantic systems, and A. Carus interpretation which states a continuity between natural languages and constructed systems. In the interpretation that the author develops, there is no real continuity between natural and formal languages, but, also, the instances of the constructed systems are not "speech habits with no logical structure" (p. 187). In the following article, Rational Reconstruction, Explication, and the Rejection of Metaphysics, Michael Friedman analyses an aspect of Carnap's transition from rational reconstruction to explication, namely, the relation between Carnap's attitude with respect with traditional metaphysics from Aufbau and his attitude developed after Logical Syntax. In particular, the author examines the way in which this transition "is entangled with his contemporaneous transition from epistemology to Wissesschaftslogik, and on the difference this makes to Carnap's mature attitude towards the relation between science and metaphysics" (p. 191). The last two articles are polemical one with each other. Mark Wilson's article, The Perils of Pollyanna, presents a criticism to Carnap's explication of 'explication'. The author, in opposition with Carnap, considers a wider spectrum of conceptual thinking as 'explicative' (p. 207). For instance, Ernst Mach's analysis of concepts, although it does not obey Carnap's desiderata, is certainly a method of explication: "the term 'explication' should directly cover efforts of a Machian ilk and not regarded, in Carnap's fashion, as merely loose motivation for some axiomatization-yet-to-come" (p. 211). Nevertheless, a good understanding of the article requires the reading of the author's book Wandering Significance. In the last article from the book, Engineers and Drifters: The Ideal of Explication and Its Critics, A.W. Carus addresses Mark Wilson's critique on the 'classical' picture of concepts, which seems to be "the most powerful challenge to the ideal of explication" (p. 225). The author concludes that Wilson's naturalism, i.e., the idea that our knowledge is imposed by nature on us, is not a conception "arrived at by argument but built into the task as a constraint" (p. 237). Wilson's descriptive pragmatics seems to provide no independent argument against constructivism.

All in all, the book seems to have accomplished its purpose of putting on the table some interesting ideas related to probably the most characteristic feature of Carnap's approach to philosophy: his ideal of explication. This shows, once again, that Carnapian studies are thriving: they offer food for thought not only to those investigating the history of early analytic philosophy, but also to those interested in contemporary theoretical philosophy. The book is thus warmly recommended.

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