Review Essay

Enlightenment and Formal Romanticism – Carnap's Account of Philosophy as Explication

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A. W. Carus, 2007, *Carnap and Twentieth-Century Thought: Explication as Enlightenment*, Cambridge, Cambridge University Press, 346pp.

1. Introduction. *Carnap and Twentieth-Century Thought: Explication as Enlightenment* is the first book in the English language that seeks to place Carnap's philosophy in a broad cultural, political and intellectual context. According to the author, Carnap synthesized many different currents of thought and thereby arrived at a novel philosophical perspective that remains strikingly relevant today. Whether the reader agrees with Carus's bold theses on Carnap's place in the landscape of twentieth-century philosophy, and his even bolder claims concerning the role that philosophy in Carnap's style should play in the thought of our century, does not matter so much as the excellent opportunity Carus's book offers thoroughly to rethink one's ideas about Carnap's philosophy. One reason *Carnap and Twentieth-Century Thought* (henceforth, CTT) might change one's ideas is that Carus has unearthed much hitherto unknown material from the archives that sheds new light on Carnap's early life and thought. Indeed, the many archival findings presented in CTT for the first time suffice to make the book rewarding reading for philosophers and historians of philosophy alike. CTT exhibits a high standard of historical scholarship, and the book itself is a beautiful example of quality academic publishing.

Up to now, Carnap has remained a controversial figure on the philosophical scene. On the one hand, he has a solid reputation as a leading figure of logical positivism (or logical empiricism). According to conventional wisdom, this was a school of thought characterized by its formal and technical philosophy, as well as being rather dismissive of other ways of doing philosophy, dogmatically sticking to its own theses. As a typical example of this arrogant logical empiricist attitude, one usually refers to Carnap's notorious *Overcoming Metaphysics by Logical Analysis of Language* (Carnap 1932), written when the Vienna Circle's Logical Empiricism had entered its most radical phase. Self-proclaimed postpositivist philosophers of science dismissed logical positivism, in particular Carnap's, as the dogmatic and orthodox "received view." The tendency to portray logical empiricism as an obsolete doctrine centering around certain "dogmas" started with Quine's *Two Dogmas of Empiricism*

(1951) and reached its somewhat ridiculous culmination in the early 1980s when allegedly "six or seven dogmas" were discovered (cf. Stegmüller 1983). Thereby an allegedly unbridgeable gap between classical "dogmatic" logical empiricism and its modern "enlightened" successors was constructed.

This standard view of logical empiricism has come under fire for some time now. In the last twenty years or so a growing number of scholars have been engaged in undermining this simplified picture. According to them, the more one engages with Carnap's real thought, the more one finds open-mindedness and pragmatism at its very core. As the revisionists claim, Carnap was a prodigy of tolerance, always engaged in the business of building bridges and finding ways of reconciling apparently irreconcilable philosophical positions. Pushing this interpretation even further, Carus proposes to consider Carnap as the founding father of a new kind of philosophy based on the notion of tolerance and characterized by an irreducible plurality of conceptual frameworks, each of which is allowed to flourish in its own right.

One may ask why such a profound misinterpretation has captivated so many philosophers for such a long time. Carnap himself might have answered that the misunderstanding was based on the fact that people were talking about two (or more) different things when they dealt with tolerance. In other words, he might have proposed that the explicandum "tolerance" is to be replaced by several different explicata, as happened in the case of "probability", which Carnap offered as his paradigmatic example. The partisans of the "new Carnapian tolerance" rely on a different strategy, however. According to them, the misunderstanding is caused by the fact that those who scorn Carnapian narrow-mindedness and intolerance simply have not read Carnap carefully. As soon as one engages in a detailed study of Carnap's writings, one will discover the true, tolerant Carnap.

More precisely, the main thesis of CTT is that in the early 1930s Carnap's philosophy underwent a thorough-going revolution that changed for ever the direction of his thought. Conceptually, this revolution amounts to the replacement of the idea of rational reconstruction or logical analysis, which marked Carnap's early philosophy, by the idea of explication. The ideal of explication, Carus contends, set Carnap's philosophy on the secure path of tolerance, pluralism, and pragmatism. Moreover, it was not only the conceptual driving force of Carnap's mature philosophy, it is also uniquely able to provide the "Enlightenment tradition" (which he whole-heartedly endorses) with a program for the future, as it provides tools for breaking out of the "dialectic of enlightenment" (CTT, 32). This claim is, as the author readily admits, "rather startling".

The main historico-philosophical thesis Carus puts forward in CTT is "that the Vienna Circle's

utopian aspirations [such as 'enlightenment', 'progress', 'socialism', T.M.] remained central throughout Carnap' s later years." In the case of Carnap, these utopian aspirations took a special form, namely, to overcome "the gap that has split the thinking world since Newton (or before)." For the generation of the young Carnap this gap might be described as the "split between knowledge and life" (*Geist und Leben*), or the opposition between "Enlightenment" and "Romanticism." Carus credits Carnap with having offered a promising way to bridge the gap by conceiving philosophy in a new key, namely, philosophy as explication.

2. The Principle of Tolerance. Carus localizes the nucleus of Carnap's novel account of philosophy as explication in the so-called "principle of tolerance" formulated for the first time in *Logical Syntax of Language* (1934). While it has been often noted that the principle of tolerance has deep philosophical implications, usually very little space has been devoted to explaining how it can be used to overcome traditional philosophy. Carus intends to do just this, and therefore is certainly to be applauded.

Some sort of tolerance principle can be traced back even to Carnap's dissertation, *Der Raum*, where he argued for the acceptance of a variety of different conceptions of space in mathematics, physics, and philosophy – although with a clear preference for a formal conception. Later, this pluralism in geometry was extended to the natural sciences, allegedly extending Poincaré's conventionalism, until even logic and language were claimed to belong to the field of conventions:

> *In logic there are no morals*. Everyone can construct his logic, i.e. his language form, however he wants. If he wants to discuss it with us, though, he will have to make precise how he wants to set things up. He has to give syntactic rules rather than philosophical considerations. (Carnap 1937, 52)

One should note that "tolerance" is only one side of the coin. The principle of tolerance also imposes a strong imperative on everyone who wants to discuss with "us", namely, the requirement to make fully explicit the syntactical rules of his language. This is a formidable requirement. Even hard-boiled Carnapians almost never took it seriously, giving explicit syntactical rules of the language form they employed in their discourses, perhaps with the exception of Carnap himself in the *Aufbau* and in *Syntax*.

One may object that this reading of Carnap's imperative is overly strong. It seems obvious that Carnap did not mean it literally. Making explicit the syntactical rules simply meant that one should express oneself as clearly as possible. This requirement is plausible enough, but is

not much more than a vague commonsense rule.

Later, the requirement that one has to make explicit the syntactical or semantical rules of the language one is to use disappears from the surface. In "Empiricism, Semantics and Ontology", which is considered as the mature formulation of the Carnapian principle of tolerance, the principle is stated as follows:

> The acceptance or rejection of ... any ... linguistic form in any branch of science will finally be decided by their efficiency as instruments, the ratio of the results achieved to the amount and complexity of efforts required. ... Let us grant to those who work in any special field of investigation the freedom to use any form of expression which seems useful to them; the work in the field will sooner or later lead to the elimination of those forms which have no useful function. (Carnap 1950, 221)

"Logicality" is taken for granted here, or so it seems. The most important role is played by a Darwinian principle of the survival of the conceptually fittest. This sounds very modern, even close to Feyerabend's notorious slogan "anything goes." Actually, a similar idea can already be found in Dilthey's *Lebensphilosophie*, which considered the struggle of *Welt-anschauungen*: "Those *Weltanschauungen* that lead to useful conceptions of life and foster its understanding maintain themselves and supersede the lesser ones" (Dilthey VIII, 85). In this selection process, neither for Carnap nor for Dilthey did arguments and reasons play any role whatsoever.

3. From Rational Reconstruction to Explication. The key to understanding Carnap's novel approach is replacing the concept of rational reconstruction with the concept of explication. The term "explication" first appears in Carnap's work, in print, in June 1945, in a paper entitled, *The Two Concepts of Probability* (Carnap 1945). The most extensive discussion of explication by Carnap himself is the first section of his *Logical Foundations of Probability* (Carnap 1950). Another important text for the elucidation of the concept of explication is his reply to Strawson (Carnap 1963). Let us start with an innocent-looking version of the new key concept of his philosophy, found in *Meaning and Necessity* (§2, 7):

> The task of making more exact a vague or not quite exact concept used in everyday life or in an earlier stage of scientific or logical development, or rather of replacing it by a newly constructed, more exact concept, belongs among the most important tasks of logical analysis and logical construction. We call this the task of explicating, or of giving an explication for, the earlier concept...

The difference between rational reconstruction or logical analysis, on the one hand, and the concept of explication on the other, is explained by Carus as follows:

> Rational reconstruction was a one-way street; vernacular concepts were to be replaced, piece by piece, with more precise ones. It was assumed that there was a single, definitive logical language in which this reconstruction could be achieved. But under the new regime of tolerance after 1932, there is no longer a single correct language. There is an infinity of possible languages, and the community must decide among them. Explication is therefore *dialectical*, as Howard Stein, ... has pointed out (Stein 1992). (Carus 2007, 41, 42)

Carnap did not have much to say about the rules or principles according to which "the community decides." He simply assumed a strict division of labor. The philosophers, as language engineers, are engaged in constructing languages, the scientific communities test them in scientific practice. It goes without saying that this is a rather abstract and unrealistic account of how the collaboration between philosophy and science could be organized.

The move from unique rational reconstruction to explicitly pluralist explication implies a fundamental change in the very task of philosophy itself. It was traditionally understood that the business of philosophy was to make assertions about philosophical issues. As assertions, the assertions of philosophy could be true or false. As the history of philosophy shows, philosophers have usually argued that the assertions of their fellow-philosophers were false. This led to interminable fruitless disputes between the various philosophical schools. Carnap wanted to get out of this rut. In *The Character of Philosophical Problems* (Carnap 1934) and *Testability and Meaning* (1936/37), he put forward a novel interpretation of what philosophical statements really are. According to him, philosophical assertions, conceived as propositions about the syntax of scientific language, could be understood essentially in two different ways; as assertions that describe the language of science available today, or as proposals that propose that the language of science should be built up in such and such a way. The second interpretation became more and more important for Carnap. Finally, he came to characterize the task of philosophers as making proposals for the linguistic forms. As Carus puts it, philosophy for Carnap became "language engineering", i.e., the construction of languages that might be useful for science in general or, more specifically, for some branches of science, or some special purposes dealing with matters scientific. In this vein, the main aim of *Testability and Meaning* was to offer definitive solutions of problems treated:

> It aims rather to stimulate further investigation by supplying more exact definitions and formulations, and thereby to make it possible for others to state their different views more clearly for the purposes of fruitful discussions. Only in this way may we hope to develop convergent views and so approach the objective of *scientific empiricism* as a movement comprehending all related

> groups – the development of an increasingly scientific philosophy. (Carnap 1936/37, 38).

This sounds very open-minded and tolerant, but one should not be too surprised at this new openness if one takes into account Carnap's situation in that time. In Vienna, the Vienna Circle no longer existed, he himself had just moved to the US, and the future of the empiricist movement was anything but secure. It was high time to look for allies and supporters wherever one could find them. As far as I know, this is the only time when Carnap explicitly mentioned Morris's project of scientific empiricism (cf. Morris 1937).

Surprisingly (or not), this loudly proclaimed tolerance was accompanied by a considerable narrowing of the scope of his philosophical perspective. When Carnap began to work in philosophy in the 1920s, he started with a rather eclectic vision of a scientific philosophy that attempted to embrace virtually everything on the market; empiricism, critical idealism, various currents of neokantianism, phenomenology, energetism, or empiriocriticism. In the *Aufbau*, he sympathetically took into account even rare and obscure work such as Rehmke's *Grundwissenschaft* or Gätschenberger's *Symbola*. When he moved to Vienna, this comprehensive perspective was gradually replaced by a more restricted version of what scientific philosophy was to be, ending up with the conception that "Philosophy is logic of science", as he put it in *On the Character of Philosophical Problems*. In some sense then, after 1930, the "outer philosophical world" disappeared from Carnap's philosophical horizon. Instead, the richnesses of an inner domain of formal languages become more and more important. Thus, the newly propagated openness can hardly be conceived as the result of a great synthesis of all the enlightenment-oriented currents of twentieth-century philosophy. Rather, it seems to have emerged from the concentration on a rather small and austere conceptual basis and perhaps rather mundane political necessities.

Carus endorses an opposite interpretation. According to him, Carnap was a great "bridge-builder", who was always engaged in the task of finding ways to overcome the gaps between apparently unreconciliable positions. It may well be the case that, from Carnap's own perspective, things appeared in this way, but from outside a quite different assessment held. After the publication of the *Aufbau* in 1928, the then still existing bridges to traditional scientific philosophy were pulled down systematically. Philosophers such as Dingler, Cassirer, Rickert, Vaihinger, Husserl, Poincaré, and many others no longer played a role for him, at least officially. Even the relations with the American pragmatists, who may be considered as the other great movement of "scientific empiricism", always remained tense.

4. Carnapian Pragmatism. One of the main pillars of Carus's general contention that Carnap's

explicative approach to philosophy is to be considered as the philosophy of the future is his claim that it is a pragmatic one. At first sight, the assumption that there was an affinity of Carnap's thought with pragmatist currents seems plausible. For instance, since its inception, the American pragmatist Charles Morris had urged the members of the Vienna Circle to engage in the common project of a "scientific empiricism" that combined the virtues of both the strands of logical empiricism in the Vienna style and American pragmatism:

> It would be possible to develop from the standpoint of scientific empiricism a modern form of the older systems of philosophy, in which the traditional philosophic fields of logic, cosmology, and value theory would find their empirical equivalent. Such an empirical synthesis must, like science itself, be a co-operative entreprise, and its erection will be the work of many generations. (Morris 1937, 5)

Indeed, Morris argued for a pragmatist scientific philosophy that comprised four different stages: (1) philosophy of science as logic of science, (2) philosophy as clarification of meaning, (3) philosophy as empirical axiology, and (4) philosophy as empirical cosmology (ibid. 8ff). For a closer collaboration between pragmatism and logical empiricism, he proposed that the empiricists should acknowledge that the envisaged scientific philosophy should not be restricted to philosophy of science in the narrow sense (1), but should recognize (2)–(4) as legitimate areas of a scientific philosophy as well, even if strictly logical methods could hardly applied to them. The reaction of the logical empiricists to this offer always remained luke-warm, although occasionally Carnap did make some gestures towards pragmatism (e.g. Carnap 1936/37). At the end of the day, however, Carnap offered nothing more to Morris than the flabby assertion "that the difference between my view and that of the pragmatists is not as large as it might appear at first glance" (Carnap 1963, 862). To put it bluntly, it seems doubtful whether Carnap was a good pragmatist. Admittedly, he paid lip-service to the pragmatist creed. Finally, however, he stubbornly stuck to his anti-pragmatist convictions, namely a strict separation between the theoretical and the practical, a clear separation between means and ends, and a neat distinction between internal and external questions. Nevertheless, some authors (e.g., Richardson 2007), claim that notwithstanding certain differences, Carnap should be considered as belonging to the pragmatist camp:

> From within Carnap's thought, then, we have have a view that stresses open-mindedness, tolerance, plurality, and a experimental spirit – all well-known hallmarks of philosophical pragmatism. (Richardson 2007, 296)

Carus is a vigorous supporter of this view. According to him: "Carnap's ideal was pragmatic to the core" (CTT, 302). I must confess that I am unable to see this. I think it is misleading to call someone a pragmatist who strictly separated the theoretical and the practical, and conceived the practical merely as instrumental. Carnap always insisted on clear-cut and neat

dichotomies; “analytical vs. synthetic”, “empirical vs. theoretical”, “internal-external” etc. Perhaps this rigid Cartesian attitude was mitigated somewhat by his pluralism, but this should not be confused with a full-blooded pragmatism. Hence I rather think that the arch-pragmatist Dewey was right when he diagnosed Carnap’s persistent inclination of strictly separating the domains of the “emotive” and the “scientific” as evidence for a basically anti-pragmatic attitude that attempted to evade the real practical problems:

> The hard-and-fast impassible line which is supposed by some to exist between the “emotive” and “scientific” language is a reflex of the gap that exists between the intellectual and the emotional in human relations and activities. ... The practical problem that has to be faced is the establishment of cultural conditions that will support the kinds of behavior in which emotion and ideas, desires and appraisals are integrated. (Dewey 1944, 444-445).

improve life is the task of man himself;
(ii) Mankind is able to change the conditions of life in such a way that many of the sufferings of today may be avoided for future generations;
(iii) Deliberate action presupposes knowledge of the world, and the best method of acquiring knowledge is the scientific method, therefore science must be regarded as one of the most valuable instruments for the improvement of life.
According to him, these general principles implied that the global political and economical problems of mankind could not be solved by "the free interplay of forces", but required rational planning: "For the organization of the economy this means socialism in some form; for the organization of the world it means a gradual development toward a world government." As a brief designation of this *Weltanschauung* in "American terminology" he proposed the term "scientific humanism" (cf. Carnap 1963, 83). It goes without saying that this sketch of a "scientific humanism" hardly bears comparison with Rawls's and Habermas's elaborated conceptions of how a just and enlightened society may look.

If one could show that, notwithstanding the conceptual and empirical poverty of Carnap's "scientific humanism", his explicative approach could offer means to improve on Rawls's or Habermas's vastly more elaborated accounts, or to overcome some of their deficiencies, this would be an excellent argument for the fruitfulness of the explicative approach. Regrettably, CTT does not fulfil these expectations. Carus does not engage in any detailed scrutiny of Rawls's or Habermas's work. Instead he is content with some general criticism:

> Rawls and Habermas share many assumptions that a Carnapian perspective allow us to dispense with. One is their unquestioning acceptance of the ordinary natural language in which we find ourselves situated ... as the canonical and ineluctable medium for all discourse. (CTT, 300)

Neither Habermas nor Rawls ever claimed that the "ordinary natural language" was the only medium that was apt to express their thoughts about justice, wealth distribution and related topics. Moreover, one may well deny that Habermas's jargon of the Frankfurt School still belongs to "ordinary natural language in which we find ourselves situated." For Carus, Habermas's and Rawls's usage of ordinary language is just a symptom of a more basic defect of their accounts. It evidences the tacit assumption "that any system of political order be rooted in some common substratum of untutored universal human nature... "(CTT, 306). In contrast,

> the Carnapian ideal regards human institutions (including languages) as the products of human constructive ingenuity, no less than science, technology, and other human tools. We *make* them, they are not out there to be found or revealed. (ibidem)

To me, this seems to be a somewhat naive instrumentalist account of language, science, and technology. It is hardly sufficient simply to state that we "make" language, science, and technology. They also "make" us, as mankind has been experiencing for some time. Technology is not a "tool" in the same sense as a screwdriver, to say nothing about science or language.

Probably a more promising feature than this radical instrumentalist interpretation of language, science, and technology is Carus's insight that to establish a common political framework it is not required that we base our considerations on some common ideas concerning reason, justice or non-coerced discourse. Following Carnap's advice, we should not start with discussing fundamental principles, rather, we should talk about language, i.e. we should attempt

> to clarify what the abstract concepts in question actually mean (in practice) to the participants and then, on the basis of such clarifications, to negociate explicata (establish meanings) that can lay the groundwork for a practice recognisable to all concerned as instantiating those abstract concepts. (CTT, 303).

In CTT the prospects of the new Carnapian explicative approach are painted with a very broad brush. Perhaps it would be advisable to follow Carnap's guidelines in a more concretely. This was done, for instance, by Amartya Sen. On several occasions Sen gave a constructive criticism of the Rawlsian account of justice in the spirit of a Carnapian explicative approach (cf. 1970, 1975 and elsewhere). For instance, in Sen (1975) he is engaged in comparing Rawls's maximin concept of justice with the more common one favored by utilitarianism. For this purpose he proposes some axioms (e.g., the axiom of symmetric preference or the axiom of weak equality) that every plausible concept of justice should satisfy (at least, at first approximation). Then he shows that neither Rawls's maximin rule nor the traditional utilitarian account complies with all these requirements. Rather, both may be characterized as extreme in that each takes into account only one half the whole picture (see Sen 1975, 310). The elegance and undeniable success of Sen's axiomatizations show that at least Rawls's approach *is* susceptible of formal explications. Sen's example evidences that, without being conscious of it, some scientists and philosophers are already engaged in a sort of Carnapian explicative philosophy.

Carus's sweeping objection against both Rawls and Habermas (namely, that both uncritically accept ordinary language) leads him to a generalized suspicion against everybody who does not whole-heartedly support the program of formal explication. He contends that:

> Behind the objections against Carnap's general approach lies a deeper and more persistent, more widespread attitude that is harder to answer head-on,

> as it is not usually made explicit. If it were, it might be expressed as the suspicion that some, perhaps most "folk" categories (including those within a scientific vernacular) are indispensable – to human emotional and practical needs, to the progress of science, or to something else. (CTT, 292)

For the last two hundred years or even longer there has been a variety of attempts to employ concepts and methods of the mathematized natural sciences to the realm of the *Geisteswissenschaften* and *Sozialwissenschaften*; e.g. Boscovitch's psychophysics, Quetelet's social physics, extreme versions of behaviorism, strong AI, and many others. All these attempts have failed. This is not to say that there is a domain of knowledge (history, humanities, *Lebenswelt*) that for *a priori* reasons is exempt from the application of formal methods. However, the burden of proof of whether these methods are really useful or not is on the side of those who advertise them. As his fellow-empiricist Neurath admonished Carnap more than once, it may well be the case that the introduction of fancy concepts and methods from mathematics or logic amounts to nothing more than the re-introduction of a glamorous but, in the end, misleading metaphysics. I think that Neurath made an important point here, although he may not have fully understood the fundamental reasons that attracted Carnap to the universe of formal metaphysics.

6. Romantic Constructivism. One major achievement of CTT is the attempt to contextualize Carnap's philosophy in the cultural and political landscape in which his hero grew up and took his first philosophical steps. The scene is presented in a neat and well-ordered manner: On the one hand we find the Enlightenment camp, on the other hand we find the forces of Romanticism, concentrated in Germany and other German-speaking countries. Arguably, only in German-speaking Central Europe did Romanticism have any appreciable influence in the public sphere during the nineteenth century (CTT, 2), while Western Europe and the US belonged to the realm in which Enlightenment traditions were firmly entrenched. The German inclination to Romantic irrationalism became even more dominant after the turn of the century, and in particular after Germany's defeat in the World War I, and reached its culmination, when in 1933 the National Socialists came to power. Like so many of his generation, young Carnap was exposed to both ideologies, to Romanticism *and* Enlightenment. In contrast to the majority of German intellectuals, however, Carnap managed to retain the best of both worlds, or so Carus argues.

Let us start with an overall picture of Carnap's political outlook when the war had come to an end. According to Carus, Carnap used the concept of politics in a very broad sense (cf. CTT, 63). For him, it meant everything that has some connection with the public social life

of people which includes practically all human activities. In order that all these activities work smoothly together, it was essential to arrive at a "form of community" (*Gemeinschaftsgestalt*), that could serve to coordinate them so as "to remove these tasks from the realm of chaotic whim and subordinate them to goal-oriented reason" (*der chaotischen Willkür zu entziehen und der zielbewußten Vernunft zu unterwerfen)*. It might be interesting to note that, a few years later, Carnap used the very same expression to describe the goal of philosophy of science when confronted with the task of establishing criteria for a reasonable choice between rival theories. More precisely, Carnap contended:

> Thus we have shown which decisions have to be made and which criteria have to be established in order to evaluate a physical theory and to decide between several competing theories, without appeal to scientific instincts that have so far reigned supreme in this area, and within the scope of conscious principles of the theory of science (*Wissenschaftslehre*). (Carnap 1923, 107)

For some, this may smack of a Enlightened scientistic absolutism of reason that did not distinguish clearly between science and politics. According to Carus, a clear echo of the scientific positivist "engineering attitude" descended from the Enlightenment via Comte and Ostwald (ibidem). In the case of Carnap, however, this "engineering attitude" was combined with a voluntarist, Romantic, and utopian streak, in particular with the conviction that after the catastrophe of the German defeat in the Great War "the world" should be rebuilt from scratch. This attitude is most clearly evidenced by his magnum opus, *Der Logische Aufbau der Welt*. Although Carnap is directly concerned only with the lofty task of the logical *Aufbau*, a closer look reveals that for him much more was at stake than just a merely logical or epistemological issue (see Galison 1996). The concept *Aufbau* encapsulates one of the basic leitmotifs of Carnap's thought. As has been pointed out by Galison, in German "*Aufbau*" is a heavily loaded concept. Its meaning does certainly go beyond the pale English translations "construction" or "structure". It evinces a pronounced moment of a strong Romantic utopianism in Carnap's *Weltanschauung*.

I believe that Carnap's orientation to (Neo)Romanticism may have been even stronger than Carus has noticed in CTT. For instance, Carnap's "boundless ocean of unlimited possibilities" is nothing but a remake of a famous slogan of Nietzsche:

> The first attempts to cast the ship of logic off from the *terra firma* of the classical forms were certainly bold ones, considered from the historical point of view. But they were hampered by the striving after "correctness". Now, however, that impediment has been overcome, and before us lies the boundless ocean of unlimited possibilities. (Carnap 1937, xv)

Fifty years before, in *The Gay Science*, Nietzsche had launched the appeal:

> *Get on the Ships*! – ... [We need] ... new philosophers! The moral earth, too, is round! The moral earth, too, has its antipodes! The antipodes, too, have their right to exist! There is yet another world to be discovered—and more than one! On the ships, you philosophers! (Book IV, § 289)
>
> Indeed, at hearing the news that „the old god is dead", we philosophers and „free spirits" feel illuminated by a new dawn; our heart overflows with gratitude, amazement, forebodings,, expectation – finally the horizon seems celar again, even if not bright; finally our ships may set out again, set out to face any danger; every daring of the lover of knowledge is allowed again; at long last the horizon appears free to us again, even if it should not be bright; the sea, *our* sea, lies open again; maybe there has never been such an "open sea." (Book V, §343)

Carnap shifted Nietzsche's radical Romanticism from the moral sphere to the theoretical domain, or, more precisely, to the realm of logic ("In logic there are no morals"). According to his interpretation, the recent achievements of logic and mathematics had opened up a new logical universe that contained an infinity of possible systems awaiting their exploration. At least temporarily, the real world and its real problems were given up in favor of an infinity of imaginary possible worlds that could be invented at will. The relation between these possible worlds and the real world became tenuous and indirect. In this way, Carnap's philosophy may be seen as a sketch for a "science of possibilities" or *Möglichkeitswissenschaft*, i.e., as the elaboration of Musil's "sense of possibilities", which he had described in *The Man Without Qualities* (see CTT, 64, 242). Carnap's affinity for "possibilities" did not come out of the blue. I propose to conceive of it as a scientistic adapation of legacy of German Romanticism. In a modernist and scientistic garb it rehearsed the basically romantic thesis that the "I" is able to build the "world" according to his ideas, or, in an even more radical manner, that the "I" has the power to built up infinitely many different worlds. At first, this claim may sound a bit startling. But Dewey in his *German Philosophy and Politics* (Dewey 1915) had considered it "typically German" that "... Germans ... can withdraw themselves from the exigencies and contingencies of life into a region of *Innerlichkeit* which at least *seems* boundless." Dewey asserted that "this region which at least *seems* boundless can rarely be successfully uttered save through music, and a frail and tender poetry..." (Dewey 1915, 45). Carnap's "boundless ocean of unlimited possibilities" indicates that the region of *Innerlichkeit* can be expressed otherwise – not only by music and poetry, as Dewey believed, but also by the construction of beautiful formal systems that describe fancy idealized worlds. Neurath often criticized this feature of Carnap's thought as an inclination to re-introduce metaphysics through the back door. Carnap's for exploring formal possibilities was the mirror image of a remarkable absence, throughout his life, of any sense sense how messy

the practical realm is. He never had any sympathy for matters of approximation, vagueness, and ambiguity. He never took seriously Neurath's fundamental idea that "*Ballungen*" were inevitable even in our best science.

In *The Man Without Qualities*, Musil clearly sympathized with the "possibility people", i.e., those that possess a refined "*Möglichkeitssinn*." Nevertheless he was well aware that a complementary "sense of reality" may be more important to come to terms with the real world: "If one wishes to pass well through open doors, one has to respect the fact that they have a fixed frame: this principle is just a requirement of the sense of reality." The Romantics will consider this remark as nothing but the expression of a boring bourgeois attitude, but there may be more in it. Without mentioning Musil, Isaiah Berlin characterized the sense of reality in the following way:

> The arts of life – not least of politics – as well as some among the human studies turn out to possess their own special methods and techniques, their own criteria of success and failure. ... Bad judgment here consists not in failing to apply the methods of natural science, but, on the contrary, in over-applying them. .. To be rational in any sphere, to apply good judgment to it, is to apply those methods which have turned out to work best ... [To demand anything else] is mere irrationalism. (Berlin 1996, 40-41).

Certainly Berlin's remark was not meant as a novel or original contribution. It is hardly more than a paraphrase of an assertion that can already be found in Aristotle's *Nicomachian Ethics*. In any case, Berlin's sense of reality is directly opposed to the radical Romantic constructivism of Carnap which attempts to build up the world from scratch thereby overcoming the "Newtonian split" between "science" and "life."

It might be interesting briefly to compare Carus's proposal with a rival project undertaken by Stephen Toulmin some time ago, see his *Cosmopolis* (Toulmin 1990) or *The Return to Reason* (2002). In contrast to Carus, Toulmin bets on the "sense of reality." According to him, for the last four hundred years, the Western imagination was captivated by the vision of "Cosmopolis", a society as rationally ordered as the Newtonian view of nature. Thereby the ideas of "reasonableness" and "rationality" – closely related in Antiquity – were separated, as an outcome of the emphasis placed on formal deductive techniques. As is exemplified by the rise of the Vienna Circle's logical empiricism and similar philosophical currents, the stress on the rationality of formal theories or calculations had such prestige that they continued to entrench themselves well into the twentieth century. While fueling extraordinary advances in all fields of human endeavor, this vision perpetuated a hidden yet persistent agenda, the delusion that human nature and society could be fitted into precise and manageable rational

categories. The liberation from the Cartesian/Newtonian straightjacket, i.e. the "return to reason", is taking place just now when at last we learn again to esteem the epistemological values of the humanistic Renaissance. Toulmin is painting this picture with a very broad brush, and he certainly oversimplifies matters, but I think, he makes some valid points. The objections against Carnap's general approach cannot be dismissed as easily as Carus would have us believe.

7. Conclusion. Those who are engaged in the historico-philosophical project of investigating the origins and the evolution of the logical empiricism of the Vienna Circle like to characterize it as a current of Austrian "late Enlightenment" (*Spätaufklärung*) (cf. Stadler 2001, 180ff). In the case of Carnap at least, it may be expedient also to take into consideration motifs from German late Romanticism (*Spätromantik*). This would be in line with a remark that Gabriel made some time ago: "For [Carnap], Frege's *Begriffsschrift* lies on the desk, so to speak, and Nietzsche's *Zarathustra* on the bedside table" (Gabriel 2004, 12). In line with Gabriel, I would contend that Romantic motifs surreptitiously had a more profound influence on Carnap's philosophy than he himself would have admitted. In Carnap's approach we find a highly complex amalgam of motives taken from science, Enlightenment, and Romanticism that is difficult to disentangle. It is an important achievement of CTT to have elucidated some aspects of this complex structure.

Theoretically Carnap's version of the Enlightenment project – as influenced by the German Neoromanticism and *Lebensphilosophie* of the early decades of the twentieth century – was radical and utopian, since it never came close to the point where it had to show that it could be realized. In my opinion, characterizing it as an "engineering approach", as Carus does, endows it with a much greater solidity than it actually had. Take, for instance, the hundreds of systems of modal logics that are available on the market. They can be considered rather directly as "proposals" in Carnap's sense. They are certainly nice gadgets logicians and mathematician can play around with, but it is not so clear if they have contributed very much to a better understanding of possibilia.

This is not to deny that we need the dimension of the possible to come to terms with reality. Without doubt it is important "to open conceptual possibilities", setting sails for exploring the "open ocean of unlimited possibilities." But perhaps one should realize that "exploring the open ocean of possibilities" fatally resembles a Romantic "flight into an interior domain (*Innerlichkeit*)", which Dewey considered as typical of German Romanticism, and that the sense of possibility needs to be complemented by a sense of reality – as was described in various ways by Dewey, Berlin, Toulmin and many others. Carus takes another

path. Unabashedly he keeps on singing Carnap's remake of Nietzsche's romantic song, taking it as the anthem of a new Enlightenment:

> Sixty years after [Carnap] first set his sights on the open sea of free possibilities, it still lies before us, all but unexplored. ... It is time we ventured forth again in the pioneering spirit of the original Enlightenment, emboldened by Carnap's example. (CTT, 309)

If Dewey et al. are correct, those of us who like doing philosophy in a Carnapian possibilist style would be well advised to take into account from time to time the advice of a friend whose philosophical outlook shares some features with that of Carnap's friend Neurath. My disagreement with some of Carus's "startling theses" should not deter the reader. CTT is a rich and important contribution to a better understanding of one of the most important philosophers of the last century. *Carnap and Twentieth-Century Thought: Explication and Enlightenment* is a fascinating book that breaks new ground for the further exploration of one of the most important philosophical currents of the last century and one that still has an important impact on the contemporary philosophical scene. CTT certainly is compulsory reading not only for those interested in matters Carnapian but more generally for everybody interested in related topics such as the history of logical empiricism of the Vienna Circle, the development of German philosophy in the twentieth century and the history of analytic philosophy in general.

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