

## REVIEWS

*Ernst Mach's Vienna 1895-1930 or Phenomenalism as Philosophy of Science.*  
Edited by JOHN BLACKMORE, RYOICHI ITAGAKI and SETSUKO TANAKA. Kluwer  
Academic Publishers: Dordrecht 2001.

In 1895, after spending much of his career in Prague, Ernst Mach returned to Vienna and took up the Chair of the Philosophy of the Inductive Sciences. He only taught until 1898, when a stroke paralyzed the right side of his body, but continued to live in Vienna until 1913, writing, keeping up with developments in physics as best he could, and defending himself against Max Planck's criticisms. Despite his brief tenure, Mach's return was an important landmark in the intellectual life of Vienna. The University was making its own statement by appointing a physicist to a lectureship in philosophy, a message later reaffirmed when Ludwig Boltzmann was selected to succeed Mach in 1901. These two dueling physicist-philosophers greatly impressed the next generation including the likes of Erwin Schrödinger, Ludwig Wittgenstein, Phillip Frank, Friedrich von Hayek, Rudolf Carnap and Robert Musil, all of whom (and more) are considered in their milieu in *Ernst Mach's Vienna*, a strong collection of essays featuring original work largely by European and Japanese scholars.

Among the many interesting points touched on in these essays, it would seem that contemporaries took it upon themselves to reconcile Mach and Boltzmann. Phillip Frank is recorded in an interview by T. S. Kuhn as saying that Viennese physicists in his opinion were "followers of Mach *and* Boltzmann" (63). Erwin Schrödinger, too, was capable of combining the two for himself (94-96), according to Henk de Regt's excellent essay. De Regt says that, like Boltzmann, Schrödinger regarded a theory as a picture (*Bild*), i.e., a working model designed to enable a clear visual understanding of nature.<sup>1</sup> Like Mach, Schrödinger could use a picture for economical reasons but withhold judgment on the ontological level. In his work on quantum theory, de Regt shows that Schrödinger prized his visualization of atomic processes as waves while recognizing that these conditions of human understanding need not be satisfied by nature (99). De Regt also shows that Schrödinger accepted Mach's philosophical doctrine of neutral monism, i.e., 'that minds and bodies do not differ in their intrinsic nature, but that the difference between them lies in the way that common neutral material is arranged.'(89) Schrödinger extended the doctrine to encompass what de Regt calls an 'idealist' theory of matter (90-91) although I think 'monistic' would be a better description, as it is not clear that Machian elements were limited to human sensations.

This collection contains less from Mach in *prima persona* than Blackmore's 1992 collection *Ernst Mach: a Deeper Look*. But this does not mean there is nothing left to say about Mach himself. For example, one of the thirty letters translated in this volume deals with the question to which I just referred, namely whether Machian elements were *mere* human sensations (in their physical and psychological variations) or whether they represented a property of the material world, like Russell's sensibilia or 'intrinsic character' of matter.<sup>2</sup> In a 1910 letter included in this collection (46) Friedrich Adler asked Mach point blank:<sup>3</sup>

Do you think it necessary to assume that there are elements which exist as objects in the absence of subjects? Obviously, such elements are not directly given [in consciousness], but what if one assumed them hypothetically as you appear to do in your *Analyse der Empfindungen* in the places I have cited? (46)

Mach replied:

According to your point of view, elements which do not belong to me don't exist. Also, how could one explain how elements might be connected both to a central nexus or theory and to a side or opposed theory as well. Your theory totally changes the position and significance of elements. Because I only seek to rationally construct a standpoint in physics, I have no problem with the double dependence of elements, for such has remained at any time experimentally provable, and has nothing to do with philosophy or metaphysics. Given such a standpoint I can also easily assume on the basis of analogy that there are probably other selves or egos with their own elements; I can even extend this conception to animals, plants and inorganic bodies. This hypothesis can serve as the provisional rounding off of the world picture and provides hope for the future development of biology (48).

Mach made other remarks like this,<sup>4</sup> in published and unpublished writings, showing that he expected a scientific (not philosophical) extension of his theory of elements from human sensations to what might be called 'world elements' in a joint science of physics, biology and psychophysics.

Mach's neutral monism comes up for negative treatment in "Wittgenstein's Machist Sources" by Henk Visser. Visser makes textual connections where Wittgenstein mentions Mach specifically, and he points out that Wittgenstein's 'anti-philosophical' orientation was quite common in the Vienna of Mach and Boltzmann, both of whom talked about verbal or conceptual pseudoproblems (140). Visser, however, denies the claim of some authors that Wittgenstein was a neutral monist (146). True, during the Tractarian period, Wittgenstein was more focused on the "a priori form of the world," and since Mach was ruthlessly skeptical of the a priori they differ fundamentally here. But when Wittgenstein talks about elementary particulars that perhaps fill in the blanks in logical space, he seems to be talking about elements in a field somehow neutral between mental things and physical things. If he were distinguishing between sense data and physical data, as Visser claims, (147-149) that would make him some sort of dualist, whereas in the passages quoted (147-148) Wittgenstein is probably

claiming that psychological and physical talk about non-overlapping colors on the same speck are two ways to picture the same logical fact. After declaring that he will “repudiate” (140) the claim that Wittgenstein was a neutral monist, Visser all but concedes that after all it “(may not be possible)” to fend off those charges. (148) Indeed, isn’t the case stronger in the opposite direction? Wittgenstein’s remark that a consistently applied idealism turns into realism strongly resembles a passage in Mach’s *Erkenntnis und Irrtum* in which Mach discusses extending the ego until it fuses with the external world of physical elements.<sup>5</sup> Another important episode may center on Russell’s 1913 theory of acquaintance which opposed the neutral monism of Mach and James.<sup>6</sup> This work was devastatingly criticized by Wittgenstein, and although we don’t know what the exact points of critique were, we do know that Russell later converted to neutral monism. Had Wittgenstein somehow convinced Russell to give up on any acquaintance with the ego and adopt neutral elements? Circumstantial evidence, yes, but surely at least as important as quoting Wittgenstein’s puerile complaints about “Mach’s horrid style.”

Wittgenstein cuts a poor figure in this book. In my view, “Ludi’s” domination of the Vienna Circle is lamented in a reminiscence by Gustav Bergmann (127), who dated the “decline” of the Circle to its preoccupation with the *Tractatus*. The members of the Vienna Circle embraced the Tractarian crystal-world way the avant-garde embraced Mies van der Rohe’s design for a glass skyscraper on the Friedrichstrasse towering over gloomy Berlin. At the beginning of the twentieth century the preoccupation was with *pure* logic over the concrete elements of reality, and their physico-biological investigation, which had been Mach’s domain. Several chapters in *Ernst Mach’s Vienna* document this collision. In the chapter by the editors on “Husserl versus Jerusalem,” for example, we see Mach and Wilhelm Jerusalem struggling to fathom Husserl’s ideal of logic as a realm separate from psychology and physics. Mach says in a letter to Jerusalem:

I have no idea what to make of Husserl’s *Wesenerschauung*. I think it is still psychology or perhaps psychologically deep insight [*Tiefblick*] ... You see that I agree with your position toward psychology. From where else could one draw cognizance [*Kenntnisse*] or knowledge [*Wissen*] other than from facts and indeed, from psychical or psychological facts? (224)

In the Rudolf Carnap chapter, Blackmore describes how the achievements of Einstein and Frege would have influenced him into valuing form over concreteness.<sup>7</sup> Blackmore describes Carnap as “a child of the age of Einstein,” (159) and shows how he subtly reinterpreted Mach’s basic neutral stuff of the universe as a conventionalist neutrality of languages, of the way we choose to *speak* about reality. Carnap didn’t take realism and phenomenalism to be theories about what things really exist, but rather as interchangeable linguistic frameworks. Blackmore rightly criticizes him for this but does not mention W.V. Quine’s arguments against Carnap on precisely this issue.<sup>8</sup>

On another Vienna Circle member, Michael Stöltzner's chapter on Otto Neurath traces his well-known holism to Machian themes, even "Neurath's thesis" (110-111) on auxiliary hypotheses, (i.e., if a protocol sentence contradicts a theory, one can reject the sentence, the theory or keep both and amend the theory with an auxiliary hypothesis.) Indeed, perhaps what we philosophers refer to as the Quine-Duhem thesis might be telescoped out into a Mach-Neurath-Duhem-Quine thesis. Also on the Vienna Circle background, the editors take a first pass at Alois Höfler's philosophy including a lucid treatment of Meinongean objects and a useful account of the lectures given before the University of Vienna Philosophical Society. And for the growing cadre of Musil scholars, Michio Imai tells of Musil's tribulations passing a doctoral dissertation on Mach with the critical Carl Stumpf as *Doktorvater*.

In addition to their own historically rich essays on Adler, Carnap and Höfler, the editors have added a section of excerpts from "collateral philosophers" that seems extraneous. Clearly, the editors would like to re-publish philosophical views more in line with a representative realist theory of knowledge, such as the 'natural dualism' of Lovejoy (to whom the book is lavishly dedicated.) The conflict between seventeenth century representative realism and nineteenth century direct realism *should* be faced head-on, but these are philosophical matters and belong in a focused essay in epistemology, informed by history but also by contemporary trends as direct realism has made a modest comeback in recent years.<sup>9</sup>

In closing, I raise a schoolmarmish protest about the large number of typos and copyediting errors in the book, at least one every few pages. This is one reason for the publisher to do at least a cursory edit of the manuscript. While the reader can gather the meaning, swatting at these flyspecks only detracts from this enjoyable collection.

#### NOTES

1. See also De Regt's essays "Ludwig Boltzmann's Bildtheorie and Scientific Understanding" *Synthese* 119, 1999, 113-134 and "Spacetime Visualisation and the Intelligibility of Physical Theories" *Studies in the History and Philosophy of Modern Physics* 32, 2, 2001, 243-265.
2. Bertrand Russell *The Analysis of Matter* New York: Dover 1959, original 1927.
3. The letter series appeared previously in German in Blackmore and Klaus Hentschel's *Ernst Mach als Aussenseiter* (Wien: Wilhelm Braumüller, 1985). The discussion refers to an article by Adler on Wilhelm Ostwald "Bemerkungen über die Metaphysik in der Ostwaldschen Energetik" *Vierteljahrsschrift für wissenschaftliche Philosophie und Soziologie* 29, N.F. 4, 1905, 287-333, or to a book *Die Metaphysik in der Ostwaldschen Energetik* (Leipzig 1905).
4. See for example the "Auszüge aus den Notizbüchern" in Rudolf Haller und Friedrich Stadler, eds. *Ernst Mach: Werk und Wirkung* (Wien: Hölder-Pichler-Tempsky, 1988). See also Erik Banks, *Ernst Mach's World Elements*, forthcoming in 2003, for a collection of these remarks.
5. Ernst Mach, *Knowledge and Error*, translated by Thomas McCormack and Paul Foulkes Dordrecht: D. Reidel, 1976, 6-7.  
 "If I now call the sum of my mental aspect, sensations included, my ego in the widest sense (in contrast with the restricted ego) then in this sense I could say that my ego contains the world (as sensation and idea). Still we must not overlook that this conception does not exclude others equally legitimate. This solipsist position seems to abolish the world as independent, blurring

the contrast between it and ego. The boundary nevertheless remains but through the extended one, that is through 'consciousness.' Indeed we could not have derived the solipsist position without observing the boundary and the analogy between my own and others' ego. Those who say that we cannot go beyond the ego therefore mean the extended ego, which already contains a recognition of the world and other minds."

6. "Theory of Knowledge of 1913" in *Collected Papers of Bertrand Russell*, vol. 7, London: George Allen and Unwin, 1984.
7. On Carnap's preoccupation with form see Michael Friedman's "Carnap's *Aufbau* Reconsidered," *Nous*, 21, 1987, 521-545.
8. W.V.Quine "On Carnap's Views on Ontology" in *The Ways of Paradox and Other Essays*, Cambridge: Harvard, 1976.
9. See Hilary Putnam's Dewey Lectures "Sense, Nonsense and the Senses", *Journal of Philosophy* 91, 9, September 1994 and John McDowell's *Mind and World*, Cambridge: Harvard University Press, 1994.

*Erik Banks*

HERBERT HOCHBERG, *The Positivist and the Ontologist. Bergmann, Carnap and Logical Realism*, Rodopi: Amsterdam/Atlanta 2001.

It was a good idea of Hochberg to treat Carnap and Bergmann together. The pairing makes for a good story or rather a good play, a comedy of confusions and changing roles. It is not at all fixed who is the positivist and who is the ontologist. In the beginning Carnap seems to be the ontologist and Bergmann insists on positivist principles against Carnap's realist semantics and against his reintroduction of Aristotelian concepts. In the end, though, Bergmann is the ontologist and Carnap the positivist like more recent leading analytic philosophers who pose as ontologists.

To be sure, the careers and the philosophical developments of Bergmann and Carnap were closely connected. Both had been a member of the Vienna Circle. Bergmann was a junior member and Carnap, 15 years older, a leading member. Both emigrated to the US in the 1930s, Bergmann three years later than Carnap. As Hochberg writes: "With Carnap's departure and the ascendancy of Waismann and "Wittgensteinian esoterics", Bergmann also stopped attending the meetings" (1f.) of the Circle. Hochberg characterises the Bergmann of the mid forties as "an extreme Carnapian positivist" (V) and he summarises his intellectual journey as taking him "from the Positivism of the Vienna circle to the extreme realism of Meinong's Graz school" (2).

Hochberg starts with a discussion of Bergmann's critique of Carnap's 1942 *Introduction to Semantics* which is directed at Carnap's relation of designation and his tendency to subsume syntax under semantics. Bergmann argues that to assume a relation of designation fosters an illusion of aboutness in the sense that

language (or a mental state) is about the world. Hochberg notes that Bergmann's view of intentionality in the 1940s was similar to recent views promulgated under the labels of "naturalism" and "deflationism" (4). Soon, however, Bergmann no longer took aboutness as an illusion but, influenced by G. E. Moore, acknowledged the problem of the mental act and of intentionality and offered different solutions in the course of time, most of them involving an intentional connection between mental act and object. Because of a similarity between Bergmann's analysis of intentionality and that of Searle's book *Intentionality* (1983), Hochberg compares them. In this comparison Searle does not look good although Hochberg is also highly critical of Bergmann.

In the first chapter Hochberg also goes into the methodological controversy between Carnap and Bergmann. Bergmann accused Carnap of abandoning positivism for metaphysical realism while insisting that positivism did involve a metaphysical position that, like the classical metaphysical positions, required reconstruction by talking commonsensically in ordinary language about a formal scheme serving as an "ideal language". Carnap was "infuriated", as Hochberg says, about Bergmann's new method of philosophical analysis.

In chapter 2, Hochberg deals with ontological systems influenced by Carnap's *Der Logische Aufbau der Welt*, such as that of Nelson Goodman. These are characterised by Hochberg with Russell's term as "bundle ontologies" because they analyse objects as bundles of properties. Bergmann offered an alternative to bundle ontologies, an ontology with bare particulars exemplifying universals. Bare particulars are individuators of objects. They are introduced to solve the problem of individuation for objects. Bergmann argues that without bare particulars the problem of individuation cannot be solved for objects and that the bundle ontologies cannot solve it. Bergmann also argues against the nominalism of Quine and Goodman. He rejects Quine's widely accepted criterion of ontological commitment as inadequate and arbitrary, since it allowed a philosopher to use primitive predicates at no ontological costs. Moreover, Bergmann pointed out that Quine's use of the terms "concrete" and "abstract" is problematic.

While Bergmann takes the literal nominalism (no properties, but only predicate words) of Goodman, Quine and Sellars to be patently inadequate, he discusses nominalist ontologies with individual properties (today mostly called "tropes") as alternatives to be taken seriously. In his book *Realism* which appeared in 1968 Bergmann contrasts reist bundle and non-reist fact ontologies. Reist ontologies try to do with one category only and without genuine complexes, i.e., complexes in which the constituents are present. Thus the bundles are more of fusions or rather, as Bergmann explains, of simple function values with their parts as function arguments. Reist ontologies tend to nominalism and internal relation and to space and time as individuators of objects whereas fact ontologies with bare particulars require universals, allow for external relations and individuate by the bare particulars. Hochberg, however, rejects Bergmann

opposition between bundles and facts. Following Russell he conceives of bundles of universals as facts which are connected by a compresence relation.

Those were the subjects of chapter 3. Chapter 4 deals first with Sellars' attack inspired by Carnap on properties, both general and individual, for which he even contrived a symbolic language without predicates. The literal nominalists admitting only objects beyond language cannot offer facts as grounds for the truth of atomic sentences. That is why they take refuge with a deflationary view of truth which reduces the truth of a sentence to that sentence. This is also designed to avoid a fundamental relation of reference. Hochberg points out that the advocates of this view as well as Kripke with his causal theory of reference simply shift the traditional problem of the relation between thought and language and the objects and facts we speak about.

Chapter 5 bears the provocative title: "Bergmann's Reism: Brentano's and Carnap's Revenge". Hochberg discusses in it the late ontology of Bergmann. The title suggests that Bergmann in the end fell back to that position ("reism") which he thought to have overcome, more precisely, that the late Bergmann fell back to Brentano's reism and Carnap's designation relation which is "literally nothing" and is introduced by a merely formal device. It is true that his late ontology has one of the three features of reism which Bergmann establishes in *Realism*, namely that complexes are not held together by a nexus, and also that Bergmann replaces nexus by functions, having diagnosed reist ontologies as function ontologies. However, Bergmann distinguishes carefully between Fregean and Meinongian functions. What he found in reist ontologies were Fregean functions. Hochberg is rather unfair here to the late Bergmann. There are still genuine complexes in the late ontology, though not only facts but also facts and so-called Two-in-Ones. Admittedly, there are grave difficulties of this ontology (as with any) and Hochberg found most of them out.

The subject of chapter 6 is the problem of the order of relata in relational facts. Bergmann realised this problem only late. Russell discovered it already in 1913 but the manuscript in which he introduced it and sketched a solution has not been published during his lifetime. Russell, in a way, forgot about it. Hochberg discusses several solutions including his own which derives from Russell's and seems to me to make sense only if he takes relational facts and facts in general to be simple, which is odd. He dismisses Bergmann's solution by associating it with the Wiener-Kuratowski definition of ordered pairs which is ontologically inadequate, indeed. Bergmann himself relates his solution to the set-theoretic definition. But it is transposed into his late ontology and becomes very different from its source of inspiration. In this chapter Hochberg also goes into the epistemology of Russell's 1913 manuscript which Wittgenstein read and attacked strongly. The controversy concerned the intentional relation, propositions, possible facts and Meinongian realism.

There follows a short chapter on the ontology of negation and quantification in Russell and Bergmann and on Carnap's criterion of intensional isomorphism applied to resolve the puzzles posed by substitution in both modal and belief

contexts. The next chapter (no. 8) is rather long. It bears the title “The Phenomenology and Ontology of Logic, Classes and Modality”. The ontological analysis of analyticity in the sense of logical truth and of classes are the main themes of Bergmann’s opus posthumum, *New Foundations of Ontology*. Bergmann is interested in classes because he needs them for his foundation of arithmetic. Hochberg compares the views of Russell, Carnap, Bergmann and set theory.

Chapter 9 deals with Bergmann’s defence of a Humean view of causation against the reintroduction of Aristotelian elements beginning with Carnap’s vindication of dispositions to the introduction of a primitive counterfactual or causal connection. Hochberg continues this defence with respect to Armstrong’s necessitation relation between universals. He finds a similar conception already in Husserl.

The focus of Chapter 10 is the mind-body problem. Hochberg discusses Bergmann’s rejection of materialism in his critical examination of the views of Russell, Carnap and Feigl and continues Bergmann’s argumentation with respect to recent versions of materialism, particularly in Armstrong and Searle. In Chapter 11, Hochberg points out that in Carnap’s *Meaning and Necessity* a technicality precludes taking predicates to stand for properties although Carnap wanted to keep open the possibility to take the predicates to designate either properties or classes. Then he exposes the weakness of Putnam’s undeservedly famous antirealist arguments in that they presuppose that predicates are interpreted extensionally. Hochberg also examines Carnap’s arguments against the “name relation” (his own earlier designation relation) and thus against reference and points out that these depend on a variable reading of ‘=’ and suffer from the lack of a theory of properties and the difficulties of complex properties.

Chapter 12 is devoted to a defence of a relation of reference. Adopting a pattern of Carnap’s *Introduction to Semantics* and early ideas of Russell, Hochberg sketches a theory of reference for mental states. It is distinguished from Bergmann’s by assuming a complex rather than a simple content and by avoiding potential facts. In the last chapter Hochberg argues for an ontological foundation of logic against Carnap and criticises Bergmann’s ontology of logic in favour of his own.

The book reviewed has to be recommended strongly. It not only “contains the first systematic study of the ontology and metaphysics of Gustav Bergmann” (as the blurb says), it is also a comprehensive critical review of analytical philosophy as a whole conducted in the analytical but also in a markedly philosophical style. It offers a more fundamental critique of this type of philosophy than is customary. In spite of its 400 pages it is dense, crammed with arguments and insights which Hochberg gained in his long philosophical career. It contains the sum of his own philosophy. A lot can be learned from it. Among others, that analytical philosophy has the wrong leaders.

Erwin Tegtmeier

LILIANA ALBERTAZZI / DALE JACQUETTE / ROBERTO POLI (eds.), *The School of Alexius Meinong* (= Western philosophy series 57), Aldershot et al.: Ashgate, 2001.

The main topic of the present volume is the thought of the Austrian philosopher Alexius Meinong (1853-1920). The book is intended to be “as complete and faithful a reconstruction as possible of both Meinong’s contributions to science and the school that arose from his thought.” (xi) It is divided into three main parts: an introduction into Meinong’s life and work, a series of articles on a number of Meinong’s disciples (Ameseder, Benussi, Ehrenfels, Frankl, Heider, Höfler, Mally, Schwarz, Veber, Witasek), and a series of articles on “Topics in Meinongian Philosophy”. These topics concern psychology, logic, ontology and metaphysics, aesthetics, and value theory.

The editors themselves note that “some aspects of Meinong’s thought (i.e., his theory of modality), and the work of some of his pupils (i.e. Kreibitz, Martinak and Pichler) are not covered.” (xi) There are still others missing, for instance, W. Liel, R. Saxinger, and M. Radakovic. Furthermore, there is nothing on Meinong’s epistemology.

This is not meant as a substantial criticism, since the present book is, as the editors note, “the widest and textually grounded reconstruction of [Meinong’s] thought and his influence.” (xi)

As far as its *conception* is concerned, the book could become a standard source for those who want to become acquainted with Meinong and his school as well as with contemporary Meinongian thought. However, it cannot be recommended as an introduction for students and scholars who do not already have some relevant knowledge, and, in general, it is recommended that readers verify the information it contains by consulting other sources. Otherwise, confusion and error could result.

The defects that give rise to my reservations include repeated misspellings of names, titles of writings and Meinongian terminology, outright historical errors, obvious misunderstandings, and distorted or unduly one-sided or incomplete representations.

It must be emphasized that the book contains a number of flawless and nicely done articles; and, of course, even those articles that I criticize below are not entirely erroneous and can be instructive in various respects. Yet it cannot be denied that the book contains more imperfections than one should expect; and I feel obliged to mention at least some of them, if only to forestall (as far as this is possible in a brief review) the spreading of errors and distorted pictures.

To start with two superficial points: Pace Albertazzi, Jacquette, and Poli (11), Meinong taught in Graz for 38 years (1882 to 1920), not for 25 years (1882-

1907); and pace Albertazzi, the psychological laboratory was founded neither in 1892 (cf. 100) nor in 1900 (cf. 251), but in 1894.

Dölling remarks that Meinong's *Über Möglichkeit und Wahrscheinlichkeit* "exceeded the results obtained so far with respect to the theory of defective objects (*unvollständige Objekte*)." (67) This passage suggests that *defective objects* [*defekte Gegenstände*] and *incomplete objects* [*unvollständige Gegenstände*] are one and the same. But Meinong explicitly distinguishes defective objects from incomplete objects (see *Über emotionale Präsentation*, §2). A defective object is, for instance, *the thought that is about itself*. Most incomplete objects are not defective.

According to Sinatra, "Ameseder observed that no relation is possible between *Objektive* and *Objekte*, but it is present between *Objektive* and *Gegenstände*." (82)

In Meinong's – and Ameseder's – terminology, both *Objekte* [*objects* in the narrow sense] and *Objektive* [*objectives*] are *Gegenstände* [*objects* in the wide sense]. *Objectives* are something like propositions and/or states of affairs. If Sinatra wants to say that, according to Ameseder, there are no relations between objectives and objects (in the narrow sense), but only between objectives and other objectives, then she is definitely wrong. Ameseder writes: "Between the objectives and all objects in general there is a relation: objects can 'stand in' objectives, and objectives can 'adhere to' objects, such that every object stands in at least one objective, and every objective adheres to at least one object."<sup>1</sup> Not only objectives, but also objects (in the narrower sense) can stand in an objective, and an objective can adhere to objects as well as to objectives. For instance, the object sun stands in the objective *that the sun is hot*; and the objective *that the sun is hot* adheres to the object sun.

Poli presents the following as one of Meinong's theses: "[B]eing and non-being are properties of objectives, not of objecta." (357) Meinong surely does not hold this. He considers being and non-being as properties of objects as well as of objectives. The golden mountain has the property of non-being, Mount Everest has the property of being.

Schuhmann claims that for Meinong "values are not properties of objects, but a person's feelings about objects – feelings that arise in response to certain properties which pertain to the objects in question." (518)

But Meinong never identifies values with feelings. Even in 1894 (that is, in the period in which he comes closest to a "psychologistic" value theory), he writes: "One will admit unhesitatingly that the value goes back to the value feeling, but yet the value is not the value feeling."<sup>2</sup>

Potrc compares Meinong's value theory with that of his disciple France Veber. He tells us that "there were no objectual correlates to emotions proposed by Meinong" (215f.), and that "[t]he real difference with Meinong was Veber's emphasis on strivings. Meinong did not envisage strivings as having any objective correlates at all. In this, Meinong followed Brentano, who also distinguishes only one kind of emotional experiences (*Gemütsbewegungen*)." (217)

In fact, Meinong introduces objectual correlates to emotions in his *Über emotionale Präsentation*. Moreover, Meinong deviates from Brentano in distinguishing two kinds of emotional experiences, namely *feelings* on the one hand and *strivings* on the other. He calls the objectual correlates of emotions and strivings “Dignitative” and “Desiderative”, respectively. However, it is true that Meinong mentions Veber as one of his students from whom he, Meinong, has benefited with regard to the theory of desideratives.

Zecha describes the relation of Meinong and Mally as follows:

[...] Mally developed his *Theory of Determinates* (Mally 1912, also Mally 1971, pp.98-104), with the important distinction between ‘to exemplify’ and ‘to determine.’ A meaning-form like ‘round-square’ is not round and square as Meinong thought. The square in this example is only *conceptually determined* by the feature of ‘being round,’ but not satisfied or exemplified in reality. Also, ‘conifer’ is conceptually determined, but not a real tree with needles, hence not exemplified. Thus, impossible as well as abstract objects are determined by their constituting elements, but that says nothing about their satisfaction or exemplification. From this thought, Mally concluded: Meinong’s strict concept of *Gegenstand* is an unsatisfied meaning-form, because there are no clearly determined things, but only more or less closed quasi-things. (195)

This passage suggests that as early as 1912 Mally (in his habilitation thesis *Gegenstandstheoretische Grundlagen der Logik und Logistik*) rejected Meinongian objects and replaced them with his “meaning-forms”. But the theory of meaning-forms (and along with it the fervent rejection of a Meinongian ontology) is an achievement of the *late* Mally. In the essay of 1912, the term “meaning-form” does not occur; the round square, for instance, is for Mally 1912 an *abstract object*. In 1912, Mally deviates from Meinong in denying that the round square is round and square; but he agrees with Meinong that the round square is an object.

Some articles suffer primarily from *omissions*. Zimmer, in his paper “Christian von Ehrenfels”, does not even try to introduce the reader to Ehrenfels’s thought, not even to his Gestalt theory (since the author does not even delineate the main theses of this theory); instead, he defends the thesis that the concept of *Gestalt* is not an invention of Ehrenfels but has a long-standing history. The main information provided about Ehrenfels (apart from some biographical notes) is that he introduced the term “Gestalt”. While Boethius is cited at length (both in the Latin original and in translation), the treatment of all the other aspects of Ehrenfels’s scientific work (including his extensive and important writings on value theory and aesthetics, which are not even mentioned in the bibliography) consists in a single clause!

Fortunately, Ehrenfels’s value theory is delineated in Schuhmann’s “Value Theory in Ehrenfels and Meinong”. But Schuhmann represents Ehrenfels as a whole-hearted defender of relativism, which is true for Ehrenfels’s views on *ethical* values but *not* for his views on *aesthetic* values. Ehrenfels’s firm objec-

tivism with respect to aesthetic values is not mentioned at all, neither in the paper on value theory nor in “Meinongian Aesthetics” (also by Schuhmann). In the latter paper, Ehrenfels is completely neglected; he does not even occur in the bibliography. This is deplorable for at least two reasons: First, Ehrenfels is, alongside Witasek, among the most important aestheticians in the Meinong school. Second, it would have been extremely interesting to compare Ehrenfels’s brave objectivistic approach with the aesthetic value relativism of the early Witasek (to whom Schuhmann dedicates the main part of his article on Meinongian aesthetics).

The representation of Meinong’s object theory given in the present volume is (not very surprisingly) strongly influenced by Dale Jacquette’s particular interpretation. This interpretation is controversial in several respects that cannot be discussed in detail here.<sup>3</sup> But I wish at least to touch at two points:

1. A recurrent theme is Meinong’s concept of *Außersein*. Jacquette tries hard to convince the reader that *Außersein* is not a third kind of being (along with *existence* and *subsistence*). He claims that it is an insight of the *mature* Meinong that *Außersein* is “ontologically neutral”. (20-28, 373-396) A similar view is held by Grossmann. (477-481)

The truth is that at the *beginning* of his development of object theory Meinong tried to consider *Außersein* as ontologically neutral, but he was never firmly convinced that this was the correct view, and the *mature* Meinong admitted that *Außersein* must be considered a third kind of being. Simons and Morscher notice this fact and provide plenty of textual evidence for it. (428, and note 17)<sup>4</sup>

2. One of the cornerstones of Jacquette’s interpretation of Meinong’s object theory is the distinction between nuclear and extranuclear properties. This distinction occurs in Meinong, but it has been rejected by Mally in favor of a modes of predication distinction. The majority of contemporary Meinong-inspired metaphysicians (e.g., Castañeda, Rapaport, Zalta) follow Mally in this respect. Jacquette belongs to the other camp.

One of the notorious difficulties of the nuclear-extranuclear distinction is to give a criterion for it. Usually the distinction is introduced by means of examples only, and this turns out to be insufficient in the light of some subtle cases. Jacquette offers a criterion based on the distinction between *predicate negation* and *sentence negation*. The idea is that *in some cases* (but not in all) there is a difference between “It is not the case that a is F” and “a is non-F”. The criterion goes roughly: If, for a specific F, “It is not the case that a is F” is not equivalent to “a is non-F”, then being F is a nuclear property; otherwise, being F is an extranuclear property.

Now even if one is willing to accept that in some cases predicate negation is not equivalent to sentence negation, it remains a controversial matter in which cases there is equivalence and in which not. The problem has not been resolved, but only shifted: Now we need a criterion in order to decide in which cases

sentence negation is not equivalent to predicate negation. Unfortunately, Jacquette does not provide such a criterion.\*

## NOTES

1. Ameseder, "Beiträge zur Grundlegung der Gegenstandstheorie". In: Alexius Meinong (Hrsg.), *Untersuchungen zur Gegenstandstheorie und Psychologie* (Leipzig: Barth, 1904), 51-120. (My translation.)
2. Psychologisch-ethische Untersuchungen zur Werth-Theorie. In: Alexius Meinong, *Abhandlungen zur Werttheorie*, Band III der *Alexius Meinong Gesamtausgabe*, hrsg. von Rudolf Haller und Rudolf Kindiger (Graz: Akademische Druck- und Verlagsanstalt, 1968), (1)-(244) [originally published 1894], p. (36). (My translation.)
3. For a detailed critical discussion of Jacquette's theory see my "Die Logik des Nichtseienden". *Grazer Philosophische Studien* 54 (1998), 165-196, and Edward N. Zalta's "On Mally's Alleged Heresy: A Reply", *History and Philosophy of Logic* 13/1, 1992, 59-68.
4. For some additional passages that prove this point definitely see my "Die Grazer Schule der Gegenstandstheorie" in Binder et al. (eds.), *Bausteine zu einer Geschichte der Philosophie an der Universität Graz* (Amsterdam-New York: Rodopi, 2001), 173-207.

\* I wish to thank Bill Hanson for linguistic corrections and the FWF (project T 75) for financial support.

*Maria Reicher*

M. FERRARI / I.-O. STAMATESCU (eds.), *Symbol and Physical Knowledge. On the Conceptual Structure of Physics*, Springer: Berlin 2002.

Scientific knowledge does not give us a mirror image of what the world really is like. This is a common conviction among many philosophers who do not share many other opinions. On the other hand, science is the best source for the knowledge we have. Hence, a natural question for philosophy of science is to ask: What kind of knowledge is scientific knowledge, if it does not yield a more or less accurate mirror image of the world? A possible answer has been: scientific knowledge is to be characterized as symbolic knowledge. This answer is, strictly speaking, not fully satisfying but only a hint where one may look for one. The concept of symbol has many different meanings, moreover, many other terms such as concept, sign, or category are often used in its place. Hence, what is meant by "symbolic" is far from clear.

The volume under review, *Symbol and Physical Knowledge. On the Conceptual Structure of Physics* (henceforth abbreviated by SPK) edited by M. Ferrari and I.-O. Stamatescu, aims to give at least a "coherent discussion concerning the symbolic character of physical knowledge" (v), if not an answer. The book

consists of three parts: *Introduction*, *Views on Symbol in the Philosophy of Science*, and *On the Symbolic Structure of Physics* collecting ten contributions written by philosophers and physicists from Germany, Italy, and Switzerland.

The quality of the contributions of SPK varies: besides pieces of solid scholarship (for instance the contributions of Ferrari, Ihmig, and Carrier) we find reports on “how the physicists see matters symbolical” and rather associative reflections on the “postmodern” character of physical knowledge which, I fear, do not contribute much to a better understanding of the symbolic character of physical knowledge. For reasons of space I don’t wish to deal with all papers collected in SPK. Instead, I’d like to concentrate on those, which seem to me the most typical ones.

The bulk of the contributions of SPK deals with the classic authors and how they attempted to come to grips with the symbolic character of the sciences. This historical approach is quite reasonable since there is no hope for finding a clear-cut and non-trivial definition of the concept of symbol that may be taken as a starting point. On the other hand, the emphasis laid on the classical accounts of Duhem, Hertz, Peirce and Cassirer leads to a certain neglect of the more modern aspects of the symbolisation debate.

SPK opens with Ferrari’s dense and useful introduction *Sources for the History of the Concept of Symbol from Leibniz to Cassirer*. Orientating himself at a systematic-historical reconstruction in a style Cassirer presented long ago in his monumental *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit* he proposes to distinguish between a Leibnizian tradition, starting with the *cognitio symbolica* of the latter, and a Kantian tradition whose core is the transcendental question about the possibility of experience.

In seven sections and two *excursus* Ferrari tells a dense and scholarly story about the development of these traditions. He not only treats the protagonists but also deals with lesser known figures (in this context) such as Wilhelm von Humboldt, Lambert or Trendelenburg. Anyone interested in the history of the problem of the symbol and its relevance for epistemology and the philosophy of the natural sciences will profit from reading Ferrari’s essay. Of particular interest for analytic philosophers of science seems to me that part of the story that deals with the symbolic accounts of Helmholtz and Hertz, which played an essential role both for the philosophy of science of the Vienna Circle as well as for the neo-Kantians of the Marburg School. Among them, the most important is Cassirer whose account may serve even today as an excellent standpoint from which one may look at the history ... “of that ‘Proteus’ which the philosophical tradition has named ‘symbol’.” (28)

The aim of Stamatescu’s contribution *On the Use and Character of Symbols in Modern Physical Theories* is “to present a physicist’s perspective on the use of symbols in physics” (35). He explicitly does not “attempt to be philosophical accurate” and renounces all ambitions “to offer history or philosophy of science considerations ...” (34) We are told many things, including *The Dynamics of Physics Development*, *The Structure of Physical Research*, *Justification and*

*Truth, Intuition and A Priori* and so on. All these issues are treated – according to analytical standards – in a rather superficial manner. In a way, this is admitted by Stamatescu himself when he concludes his paper with the assertion that his contribution “was not intended to prove or disprove ... arguments but to illustrate the way in which they are involved in practical physical thinking.” (70) I wonder if the philosophical readership of SPK will buy into this.

The second part of SPK starts with Ihmig’s contribution *The Symbol in the Theory of Science: Duhem’s Alleged Instrumentalism or Conventionalism and the Continuity of Scientific Development*. Discussing Duhem’s ideas of the symbolic character of physical theories needs no justification, his remarks on that topic in *The Aim and Structure of Physical Theory* are an almost indispensable source of inspiration for anyone working in this field. Nevertheless, it is not all clear how Duhem’s thesis of the symbolic character of physical knowledge is to be interpreted in the spectrum between realism and instrumentalism. Ihmig argues that the standard interpretation of Duhem’s account as instrumentalist and conventionalist is in need of qualification, in particular, if one takes into account his key concept of natural classification.

I confess that I could not make much sense of the second piece of part II, Rudolph’s *Beyond Realism. Symbolism in the Philosophy of Science by Charles S. Peirce and Ernst Cassirer*. A charitable reading may take it as a rather idiosyncratic introduction to Peirce’s semiotic philosophy, contrasting it with Cassirer’s account. According to Rudolph, “Peirce’s philosophy is based upon three centers of gravity forming a system, the organization of which can be exemplified as three concentric circles. The innermost circle represents the endeavour to create an original logic of science based primarily on the history of sciences from Galileo to Mach ...” (97) This is, in my opinion, a rather strange interpretation of Peirce. The reader may judge for himself.

The aim of Hüttemann’s *Heinrich Hertz and the Concept of the Symbol* is to discuss the various writings in which Hertz dealt with what he considers to be Hertz’s central epistemological question, namely, “to sort out which features of our theories can be attributed to nature as opposed to those which depend on us.” (109) For this purpose he mainly relies (as is to be expected) on Hertz’s *Principles of Mechanics* and, to a lesser extent, on his *Electric Waves*. I find his conclusion unsatisfying: according to Hüttemann, “conceiving physical theories as images or symbols is a means to answer Hertz’s question. Theories ... owe some of their features to what they stand for ..., ... they also owe some of their features to those who produce or construct them.” (120) Who would dare deny this? If the symbolic account is to be interesting it has to offer something more specific.

Let us now come to the third part of SPK *On the Symbolic Structure of Physics* dealing with some more specific features of the role symbolization plays for physical knowledge. Falkenburg’s *Symbol and Intuition in Modern Physics* intends to use Kant’s theory of intuition to shed some light on the role intuitive concepts and models play in contemporary physics, in particular in quantum

theory. As she points out, although modern physics is highly abstract or “symbolic”, the language of modern physics inevitably relies on intuitive concepts in order to embed its abstract structural descriptions in natural language. According to the rationalist account of Leibniz, symbolic cognition is, by definition, “blind”, i.e., cognition without intuition. This is, if one follows Falkenburg (following Kant) not the whole story. According to a Kantian approach the most important function of intuition is not to provide some psychologically pleasing vividness to knowledge. Rather, intuition is essential for the constitution of objects of experience. Hence, characterizing symbolic knowledge as blind does not suffice. In order to become connected with some domain of experience, symbolic knowledge has to rely on some sort of secondary intuition, so to speak. Therefore, according to Falkenburg, even in contemporary physics there is a place for some kind of intuition which may be better understood philosophically by Kant’s aesthetic ideals of cognition set out in his *Prolegomena*. As an example for the systematic application of such secondary intuition, which perhaps might be called “symbolic intuition”, the author mentions the Feynman integrals in quantum field theory.

Carrier’s *Shifting Symbolic Structures and Changing Theories: On the Non-Translatability of Empirical Comparability of Incommensurable Theories* is one of the few contributions in SPK that attempts to connect the classical symbolisation debate with a central topic of genuinely modern philosophy of science, to wit, the problem of incommensurability. This problem does not show up in Cassirer, Duhem, Peirce, Helmholtz or Hertz, at least not in the acute form as has been presented to the philosophical community of the late 20<sup>th</sup> century by Kuhn, Feyerabend, and their followers. Incommensurability is to denote the non-translatability of concepts or statements from different, strongly contrasting theories. Carrier’s aim is to give a systematic reconstruction of the nature and impact of semantic incommensurability. Kuhn as an adherent of semantic holism. Following the standard lines of argumentation, he identifies meaning holism as the door by which incommensurability enters the scene: If the meaning of a term is determined “holistically” by the theory in which it occurs, it becomes difficult to say in what sense its meaning remains stable when a theory is replaced by an incommensurable successor in which seemingly the “same” term occurs. A classical example, discussed long ago by Putnam and others, is the case of the term “electron” appearing in the incommensurable theories of Thompson, Lorentz and contemporary theories.

Carrier offers something more interesting than these rather outworn examples. He presents a nice list of incommensurable “natural kinds” that appear in the competing theories of Lorentzian and Einsteinian mechanics. He points out that the incommensurability of these theories results from the intranslatability of their key terms, which is based on the logical incompatibility of the law structure. In Cassirer’s terms one may say that he rightly emphasises the importance of the logical structure of symbol systems. This is, I think, a step forward compared to the generalities Hüttemann offered in his contribution being content to

assert that physical knowledge is symbolic *tout court* simply by stating that theories are symbols. Regrettably, many contributions in SPK neglect the logical aspects of the symbolic nature of physical knowledge. Thereby they fall back behind Cassirer's insight that the essence of the symbolic may not be found in isolated symbols but rather in systems of symbols.

In *Symbolizing States and Events in Quantum Mechanics* Held argues against a superficial parallelity between the symbolic frameworks of classical and quantum mechanics, according to which the latter is characterized by the additional feature of probability: "The general view is that the fundamental difference between classical and quantum-physical formalism, wherever it is located lies beyond this semantic parallelism of the basic symbols for system states and events." (192) According to Held, this view is mistaken. The basic difference between the classical and the quantum framework is to be found *in* their conceptual frameworks. For this purpose he attempts to revive and re-interpret an argument of Einstein which has long been dismissed as inadequate by quantum orthodoxy. Held's contribution may not be easy reading for the philosopher but I think it is well worth the effort since it shows that the specific features of a symbolism really matter in physical theories.

Let us close with some general criticism. According to the editors the aim of this book is to provide a consistent, if not comprehensive, view on the symbolic, emphasizing aspects that are paradigmatic for the natural sciences as a whole. Moreover, "this book is not to be a 'loose collection of articles' but to present a more coherent discussion concerning the symbolic character of physical knowledge." (V) I am not convinced that SPK has attained these ambitious goals. Take, for instance, consistency: in the Introduction Ferrari points out that the roots of the concept of symbol are to be found in Leibniz and Kant. Pirner, in his *The Semiotics of "Postmodern" Physics* asserts: "Historically the concept of sign and symbol goes back to Helmholtz and Hertz ..." (217) More seriously, SPK shows a certain bias vis-à-vis historical aspects of the symbolic character of scientific knowledge. Leibniz, Kant, Helmholtz and Duhem are all fine, but it is to be hoped that since their times philosophy of science has made some progress in elucidating the symbolic character of scientific knowledge. In this respect, not much is to be found in SPK. Despite its title, SPK is more on the history of the concept of symbol in philosophy of science than on the symbolic structure of physics. Leaving aside some remarks on postmodern authors, the "most modern" philosophical author treated in SPK is Kuhn. Nothing about "cognitive models", "the cognitive turn", "the semantic view of theories" – only one timid remark on Social Constructivism. This is not enough for making a contribution to the contemporary debate on the symbolic character of physical (and more generally scientific) knowledge. The problem of the symbolic character of scientific knowledge should be treated not only as a topic of the history of philosophy of science, it is an interesting problem of contemporary philosophy of science.

I do not want to be too fastidious, but some flaws with respect to formal matters have to be criticized: Duhem's opus magnum is mentioned in its English,

French, and German editions. In one contribution, “Peirce” appears rather consistently as “Pierce”, and even if today only a purist will militate against the usage of “international English”, nobody wants to see grammatical monsters such as “he critiqued” or “he maked it” in an expensive book by a renowned publisher. Moreover, an index would have been useful for this kind of book.

In summary, one can say that SPK does not offer a fully satisfying account of the symbolization problem as it is treated in contemporary discussions. The strong points of the book lie on the historical aspects of the problem, while the contemporary debate is underrepresented. Nevertheless one may heartily agree with the general argument of SPK, namely, that the problem of the symbolic character of physical should have a place on the agenda of any comprehensive account of philosophy of science.

*Thomas Mormann*

UWE CZANIERA, *Gibt es moralisches Wissen? Die Kognitivismusdebatte in der analytischen Moralphilosophie*, Mentis: Paderborn 2001.

Why is it so difficult to give reasons for morality? In *Is There Moral Knowledge?* Uwe Czaniera concentrates on the difficulty of establishing philosophically any criteria of moral action. His book is also in a way an expression of that same difficulty, since he finds himself forced to adopt a position that he originally presents as implausible. He is opposed to any view which seeks to ground an unconditioned ‘ought’ in the concept of a completely independent and therefore rational will (24-43), in the belief in the existence of God (84) or in any intuitive, unmediated “knowledge” (89), and he sees the only alternative as lying in a kind of “pragmatic naturalism” which holds that moral claims are neither true nor false.

What the author calls his “pragmatic naturalism” is a combination of “naturalism and non-cognitivism” which he sees as the only way to explain the existence of moral practice (15f., 226). On this view we merely talk as if actions have the properties of being right or wrong, but in fact nothing has such properties at all (243, *passim*). Given that he adopts from the beginning the non-cognitivist view that moral claims lack propositional content, it is not surprising that the answer to the question of the title and leitmotiv of the book – is there moral knowledge? – turns out to be negative. It is not that we lack moral knowledge because what we believe is not true; rather, in morality the question of truth and falsity does not even arise. This is a strong claim which is hardly defended in this book.

Following a summary of Hobbes', Shaftesbury's and Hume's explanations of morality (43-65) and a discussion of the philosophy of the Vienna Circle in general (65-102) the author gives mainly an overview of recent "cognitive" accounts of understanding moral judgement (chapter 3: 103-225). There is no doubt that *Gibt es moralisches Wissen?* serves the purpose of introducing a number of prominent accounts in modern Anglo-american moral philosophy which still have not entered much the discussion in German-speaking philosophy. And it draws attention to the difficulties and obstacles in explaining the usage of evaluative predicates if it is by metaphysics that the objectivity of "... is good" predications is to be reached.

But to establish the non-cognitive status of moral claims it is not enough to simply expose various "defects" in defences of "cognitivism". The negative task of showing the views of some aspects of moral judgments to be wrong is what takes up most pages of this book with the aim of rejecting all moral views in the tradition of Kant, among which Czaniera includes many twentieth-century accounts.

Czaniera is certainly right that there are moral imperatives that are not assertions, that the predicate "... is good" cannot be understood solely as a description (as he argues against the analyses of Philippa Foot and Peter Geach and to some extent against Bernard Williams, 188-194, 211-218), and that the desired objectivity would be lost if evaluative terms are understood on the model of dispositional views of "secondary quality" terms (as he argues against the views of John McDowell, Peter Railton, and Mark Johnston, 168-180). He is also right that many attempts to defend a propositional understanding of moral judgements suffer from the "defect" of introducing queer entities that are somehow supposed to guarantee the truth and motivational force of moral claims (as his discussion of David Brink's "ethical realism" shows, 143-148). But this would amount to a fatal objection to all forms of "cognitivism" only if such entities must always be introduced in order to explain how moral maxims can be judged right or wrong.

Czaniera apparently thinks that such entities are always needed, but he does not really explain why he thinks so.

One suggestion might be that he finds such queer entities essential to any possible defence of "cognitivism" because he can discover no aspects of the familiar perceivable world that could serve as the denotations of value predicates. This brings to mind the views of morality associated with the Vienna Circle, and indeed Czaniera allies himself with those doctrines in opposition to "cognitivism", or rather to what is called 20<sup>th</sup> century "neo-cognitivism". What he shares with the Vienna Circle is really no more than the doctrine of the non-propositional character of moral judgements. (92-102).

The argument of the Vienna Circle regarding the meaninglessness of moral terms drew limits as to what can be achieved by any philosophical account of morality. If sentences using such terms say nothing, then accounting for the actual function of such sentences, whatever it might be, cannot serve to ground our moral practice. Calling moral sentences meaningless means that any expla-

nation of why we nonetheless continue to talk as if things had values as properties would suffer from the same meaninglessness as the moral sentences themselves. Czaniera does not take these considerations seriously enough. He thus succumbs to the contradictory position of holding that moral sentences are only expressions of the combination of feelings, orders, imperatives or the like while at the same time arguing that his own “adequate theory of morality” grounds our practice of talking as if things had values as properties.

Once the verification principle of meaning has been abandoned (98f.) and the exclusive concentration on language has been exposed as a fatal “misunderstanding” (213, 225) Czaniera sees in the overcoming of any lingering scepticism the hope for a positive grounding of our moral practice. This would take the form of a basically Humean moral philosophy enriched with elements taken from Gerhard Vollmer, Allan Gibbard, R. M. Hare, and from various anthropological theories (226-272). The fundamental idea is that the objectifying surface grammar of moral sentences is no more than the projection onto the world of certain individual personal feelings and attitudes, while that appearance of objectivity is itself necessary for the possibility of the human co-ordination of interests essential to social life (243f.).

Only towards the end of the book does it become reasonably clear that for Czaniera “giving reasons for moral practice” means explaining the human function of that practice. Since he insists on carrying out that task without assuming the truth or falsity of any moral sentences, what his “pragmatic naturalism” is really meant to explain is the rhetorical force and efficacy of the use of those sentences. This is, in effect, to equate morality with hypocrisy, but it is not clear that the author is aware of this consequence. Some remarks towards the end of the book suggest that he thinks that morality is simply an “artefact” that speakers can use to bring others into accord with their own interests “in the name of morality” (268). But he also offers reasons for the considerate treatment of other people (253f.), and on this view he himself could not find those reasons convincing. Nor could anyone find convincing any reasons he could offer for why that person should restrict his own interests out of consideration for others.

If Czaniera fully accepted the view that morality is a useful illusion that human beings fall prey to, then he would hold precisely the position that most of his book argues against. He would then regard the sentences whose use he thinks promotes mutual satisfaction of interests within human society as expressing something that is good. That would be a form of the very “cognitivism” that he claims to oppose.

Czaniera does not fully acknowledge that in appealing to the good results of the smooth functioning of human society (237) he is, in effect, advancing his own criterion of the rightness of action. It is not simply that he explains why it is rational for human beings to accept a shared system of norms – that is not necessarily to give reasons why it is right or good to do so. Rather, throughout the book he regards many of the consequences of smooth social interaction as themselves good. He holds, for instance, that it is a good thing that people in

society are considerate of the interests and well-being of others (241f.). That is, in effect, to hold that it is true that considerateness is good. It is only because Czaniera wrongly assumes that any such belief would have to be given some non-moral justification – which he rightly thinks is necessarily unavailable – that he is led to defend a version of non-cognitivism while silently holding a view that contradicts it.

“Is There Moral Knowledge?” is valuable in making the reader familiar with “cognitive” views of morality the 20<sup>th</sup> century and provides a survey of central objections raised against them. So far it indeed serves as an introduction to the “cognitivism vs. noncognitivism”-debate that has dominated Anglo-american moral philosophy for the last decades.

*Gabriele Mras*

## ACTIVITIES OF THE INSTITUTE VIENNA CIRCLE

### ACTIVITIES 2002

#### ***ESF-Network:***

#### ***Historical and Contemporary Perspectives of Philosophy of Science in Europe***

Second International Workshop, Vienna: "Induction and Deduction in the Sciences"

*Location:* University of Vienna, University Campus, Aula

*Date:* July 7-9, 2002

*Lecturers:* Peter J. Clark, Donald Gillies, Ivor Grattan-Guinness, Adam Grobler, Malachi Hacohen, Eckehart Köhler, Theo Kuipers, Ladislav Kvasz, Joke Meheus, Karl Milford, David Miller, Ikka Niiniluoto, Michel Paty, Stathis Psillos, Hans Rott, Nils-Eric Sahlin, Matti Sintonen, Friedrich Stadler, Max Urchs, Ryszard Wójcicki

<http://www.esf.org/>

#### ***Special Symposion***

#### **LAKATOS AND POPPER REVISITED**

organized by the Vienna Circle Institute, as part of Karl Popper 2002 Centenary Congress

*Date:* Saturday July 6, 9-11 a.m.

*Location:* University of Vienna, main building

Institute Vienna Circle book presentations:

*Appraising Lakatos. Mathematics, Methodology, and the Man.* Kluwer 2002

*History of Philosophy of Science. New Trends and Perspectives.* Kluwer 2002

*Lectures:* John Worrall (LSE, London), "The Continuing Significance of Lakatos's Philosophy of Science"; Malachi Hacohen (Duke University, Durham, NC), "Popper's Political Legacy in Historical Context"

#### ***Second Vienna International Summer University***

#### ***Scientific World Conceptions***

"Mind and Computation"

organized by the University of Vienna and the Institute Vienna Circle

*Location:* Vienna, University Campus

*Date:* July 15-26, 2002

*Main Lecturers:* Michael Hagner (Max Planck Institute for the History of Science, Berlin, Germany), Brian P. McLaughlin (Rutgers University, USA)

*Assistant Lecturers:* Güven Güzeldere (Duke University, USA), Paul Ziche (Bavarian Academy of Sciences and Humanities, Munich, Germany)

*Guest Lecturer:* Anton Zeilinger (University of Vienna, Austria)

<http://ivc.philo.at/VISU/>

### **10<sup>th</sup> Vienna Circle Lecture**

as part of the 2<sup>nd</sup> Vienna International Summer University

ANTON ZEILINGER (University of Vienna)

Observer and Reality in Quantum Physics

*Location:* University Campus, Aula

*Date:* 16 July 2002, 6 p.m.

### ***Scientific World Conception and Art***

Art, Theory of Art and Studies in Art in the Scientific Discourse

*Coordination:* Martin Seiler and Friedrich Stadler

*Presentations:* Interdisciplinary project “Studies on the formation of Viennese musicology”; Sybilla Nikolow (Bielefeld), “Otto Neurath’s pictorial statistics as strategy of popularization in the social sciences”; book project by Volker Thurm-Nemeth (Wien), “Vienna and the Vienna Circle. A Companion for Empiricists”; Martin Seiler (Wien), “The ‘Manifesto of Austrian Philosophy’. Kurt Blaukopf’s posthumous papers on the appointment of Robert Zimmermann to the chair of philosophy at Vienna University”

<http://ivc.philo.at/wwuk/2001.html>

### ***Moritz Schlick (1882-1936): Critical Complete Edition and Biography***

The goals of this planned 10-year research project, financed by the Austrian Research Fund (FWF), which will begin with a three-year start-up phase are the following: to put together a Critical Complete Edition of Moritz Schlick’s Writings and to write a Biography (12 plus 1 volumes) within the context of the history of philosophy and science. The ongoing research in philosophy of science will contribute to closing some big lacunae and will facilitate future studies in this area. The planned edition will for the first time make Schlick’s entire work, which until now was only available in a fragmentary way, accessible to a

large circle of students and scholars and interested readers. The edition will be edited and commented on in German.

This international research and edition project is being carried out as a joint initiative by the *Institute Vienna Circle* based in Vienna (A), the *Research and Documentation Center for Austrian Philosophy (Forschungsstelle und Dokumentationszentrum fuer Oesterreichische Philosophie* in Graz (A) and the *Department of Philosophy (Institut fuer Philosophie) at the University of Rostock* (G). Moritz Schlick's writings (housed at the Rijksarchief in Haarlem, NL) that are crucial for this project have been archived and copied onto CD-ROM so that they are now accessible in Vienna, Graz and Rostock. The administrators of the Schlick papers have agreed to sign a publication contract with Springer Verlag (Vienna – New York). For the first time all (published and unpublished) writings including correspondence will be accessible to researchers and the public. Parallel to this, the first intellectual biography on Schlick will be put together.

<http://ivc.philo.at/Schlick-Projekt/>

### ***Publications***

*Intellectual Migration and Cultural Transformation. Refugees from National Socialism in the English-speaking World*

Ed. by Edward Timms, Jon Hughes

Wien-New York: Springer (Veröffentlichungen des Instituts Wiener Kreis, Bd. 12)

*History and Philosophy of Science – New Trends and Perspectives*

Ed. by Michael Heidelberger and Friedrich Stadler

Dordrecht-Boston-London: Kluwer 2002 (Vienna Circle Institute Yearbook 9/2001)

*Appraising Lakatos – Mathematics, Methodology and the Man*

Ed. by Ladislav Kvasz, George Kampis and Michael Stöltzner. Dordrecht-Boston-London: Kluwer 2002 (Vienna Circle Institute Library 1)

### ***Library and Documentation***

Expansion of primary sources and secondary literature and the Vienna Circle and its influence.

Acquisition of estates and archival material in Austria and abroad.

*Robert S. Cohen Collection and Archives*: Robert Sonné Cohen (b. 1924) is an American philosopher, scientist and historian of science and philosophy who has been editing the *Boston Studies in the Philosophy of Science* and organizing the *Boston Colloquium for the Philosophy of Science* for many decades. The Robert S. Cohen Collection contains correspondence, unpublished and published

manuscripts and typescripts, reprints, journal issues, news clippings, photographic prints, sound recordings, memos and notebooks.

A substantial portion of the Robert S. Cohen Collection is being made available for use by educators and researchers at the Institute Vienna Circle as the Robert S. Cohen Archives. The Institute Vienna Circle will provide access to full-sized photomechanical reproductions of documents selected from the Collection that offer insight into the development of Logical Positivism.

*Adolf Gruenbaum Archives:* The institute plans a similar acquisition with the private archives of Adolf Gruenbaum, the founder and chair of the Pittsburgh Center for Philosophy of Science.

*Eugene T. Gadol Library:* The research library of Eugene T. Gadol was dedicated to the Institute Vienna Circle in 2002 by his heirs and will be available for research in the near future.

#### PREVIEW 2003

##### ***International Symposium***

Austria's Response to National Socialism: Implications for scientific and humanistic scholarship

*Date:* June 5-6, 2003, 9-12 a.m. and 3-6 p.m.

*Location:* University of Vienna

*Scientific Head:* Friedrich Stadler, together with Eric Kandel, Fritz Stern und Anton Zeilinger

*On behalf of:* Federal Ministry of Education, Science and Culture, together with the University of Vienna

*Organizer:* Institute Vienna Circle and University of Vienna: Center for Interdisciplinary Research (Zentrum für überfakultäre Forschung), Department of Contemporary History (Institut für Zeitgeschichte), Department of Experimental Physics (Institut für Experimentalphysik)

##### ***Third Vienna International Summer University***

SWC Scientific World Conceptions

“Biological and Cosmological Evolution”

*Location:* Vienna, University Campus

*Date:* July 14-27, 2003

*Organizer:* University of Vienna and the Institute Vienna Circle

*Main Lecturers:* Karl Sigmund (University of Vienna, Austria), Eörs Szathmáry (Eötvös Loránd University, Hungaria), Robert M. Wald (University of Chicago, USA)

*Assistant Lecturer:* Daniel Holz (University of California, Santa Barbara, USA),  
<http://ivc.philo.at/VISU/>

***ESF-Network:***

***Historical and Contemporary Perspectives of Philosophy of Science in Europe***

Third International Workshop, London: “*Laws and Models in Science* ”

*Location:* Kings College, London

*Date:* Sept. 6-10, 2003

***Scientific World Conception and Art***

Art, Theory of Art and Studies in Art in the Scientific Discourse

*Coordination:* Martin Seiler

*Research Project:* The roots of Austrian philosophy in Vienna, as exemplified by the life and work of Robert Zimmermann (1824 – 1898) on the basis of Kurt Blaukopf’s posthumous papers.

***Publications***

*The Vienna Circle and Logical Empiricism*

Ed. by Friedrich Stadler. Dordrecht-Boston-London: Kluwer 2002/03 (Vienna Circle Institute Yearbook 10)

*Language, Truth and Knowledge. Contributions to the Philosophy of Rudolf Carnap*

Ed. by Thomas Bonk. Dordrecht-Boston-London: Kluwer 2003 (Vienna Circle Institute Library 2)

*Wissenschaftsphilosophie und Politik / Philosophy of Science and Politics*

Hrsg. von Michael Heidelberger und Friedrich Stadler. Wien-New York: Springer (Veröffentlichungen des Instituts Wiener Kreis, Bd. 11)

*Wien und der Wiener Kreis. Ein Begleitbuch für Empiriker / Vienna and the Vienna Circle. A Companion for Empiricists*

Von Volker Thurm-Nemeth, Wien: WUV Verlag

IN MEMORY OF EUGENE T. GADOL  
(1920 – 2000)

Eugene T. Gadol passed away on December 22, 2000 in Vienna, Austria. He was born there in May 31, 1920 as son of the dentist Rubens Gadol and the dental surgeon Anna Gadol (née Blum). His half-sister died early. In 1938 he had to emigrate to the USA (New York) and in 1943 he became a US citizen. In 1955, he married Joan Kelly, professor of history at City College, New York (\*1928 Brooklyn, N.Y.C., †1982 N.Y.C.). From 1956 to his retirement in 1983, Eugene Gadol taught philosophy in New York. He then moved back to Austria and settled in Vienna and Baden near Vienna. His bibliography contains some 100 publications in diverse fields, of which about 40 are in the field of philosophy.

Prof. Eugene Gadol was educated in Vienna – at a high school (*Realgymnasium*) with musical education – as well as in the USA (New York) and England (Oxford). His publications range from drama and aesthetics to psychology, politics, history of philosophy, and philosophy of science. He was the recipient of several grants (among them a Rockefeller Grant-in-Aid). His main field of research and publication was the life and work of Ernst Cassirer and the (post)analytic philosophy in the tradition of Wittgenstein and the Vienna Circle.

In 1938 Eugene Gadol was forced to emigrate from Austria to the USA for political and so called “rascist” reasons because of his Jewish background. There he first worked in factories, before he studied music and theater, most notably with Erwin Piscator at the Dramatic Workshop of the New School for Social Research, New York City. In 1943 he received a B.F.A. (Major Drama) at the University of Oklahoma, Norman/Okla.; and from 1943-1945 he served in the US Navy, concurrently graduated as electronics engineer at Texas A&M.

After World War II Eugene Gadol resumed his work at the theater on Broadway and Off-Broadway. For ten years he worked as stage-manager, director and reviewer in the theater business (*inter alia* at the Neighborhood Playhouse Philadelphia, Pa.).

Until 1950 he studied at New York University, Oxford, and Columbia University. After having finished his graduate and postgraduate studies he received a Rockefeller Grant and worked as a Research Assistant to Susanne (Susan) K. Langer till 1952 at Columbia University, where he published his first philosophical articles jointly with his teacher. From 1956-1957 he was instructor for philosophy at Lehigh University, and afterwards at Brooklyn College, N.Y.C. for two years. Following these short lectureships he taught at the New School for Social Research, and became a Consultant in Logic at IBM, Kingston from 1958 to 1964.

After retiring in 1983 Eugene Gadol commuted between USA and Europe teaching and lecturing at several universities, research institutions and adult educational institutes, especially in Austria (Vienna).

His administrative positions included the Presidency of the Association of professorships at the New School for Social Research (1964). He also served as the Director of the College on the Green, Woodstock, N.Y. (1972). He was a member of the Society of Ancient Greek Philosophy, of the Association of Symbolic Logic and of the American Society of Aesthetics.

Eugene T. Gadol was a lifelong passionate philosopher fighting for his arguments in favor of an exact and rational philosophy in the tradition of Central European reasoning. Regrettably, he never succeeded in obtaining an adequate permanent academic position. In keeping with his last will he was buried at the Viennese *Zentralfriedhof* (Jewish cemetery).

*Note:* The philosophical library and papers of Eugene T. Gadol are located in the *Institut Wiener Kreis/Vienna Circle Institute*.

*Friedrich Stadler*

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## VIENNA CIRCLE INSTITUTE YEARBOOK

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The *Vienna Circle Institute* is devoted to the critical advancement of science and philosophy in the broad tradition of the Vienna Circle, as well as to the focussing of cross-disciplinary interest on the history and philosophy of science. The Institute's *Yearbooks* provide a forum for the discussion of exact philosophy, logical and empirical investigations, and analysis of language. Each volume centers around a special topic which is complemented with a permanent section with essays arising from the scientific activities at the Institute and reviews of recent works in the history of philosophy of science or others with a particular relation to the tradition of logical empiricism.

- 1 [1993] F. STADLER (ed.), *Scientific Philosophy: Origins and Developments*. 1993, ISBN 0-7923-2526-5
- 2 [1994] H. PAUER-STUDER (ed.), *Norms, Values, and Society*. 1994, ISBN 0-7923-3071-4
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