

Studies in German Idealism

Series Editor:

Reinier Munk, *Vrije Universiteit Amsterdam, The Netherlands*

Advisory Editorial Board:

Frederick Beiser, *Syracuse University, U.S.A.*

George di Giovanni, *McGill University, Montreal, Canada*

Helmut Holzhey, *University of Zürich, Switzerland*

Detlev Pätzold, *University of Groningen, The Netherlands*

Robert Solomon, *University of Texas at Austin, Texas, U.S.A.*

SALOMON MAIMON: RATIONAL DOGMATIST, EMPIRICAL SKEPTIC

Critical Assessments

Edited by

GIDEON FREUDENTHAL

*The Cohn Institute for the History and Philosophy of Science and Ideas,
Tel Aviv University, Israel*



I.P. Catalogue record for this book is available from the Library of Congress.



N 1-4020-1473-2

Published by Kluwer Academic Publishers,
P.O. Box 17, 3300 AA Dordrecht, The Netherlands.

Sold and distributed in North, Central and South America
by Kluwer Academic Publishers,
101 Philip Drive, Norwell, MA 02061, U.S.A.

In all other countries, sold and distributed
by Kluwer Academic Publishers,
P.O. Box 322, 3300 AH Dordrecht, The Netherlands.

3H 854 12

Printed on acid-free paper

All Rights Reserved

© 2003 Kluwer Academic Publishers

No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work.

TABLE OF CONTENTS

Preface	vii
INTRODUCTORY ESSAY	
GIDEON FREUDENTHAL: A Philosopher between Two Cultures	1
PART ONE: Rational Dogmatism	
ODED SCHECHTER: The Logic of Speculative Philosophy and Skepticism in Maimon's Philosophy: <i>Satz der Bestimmbarkeit</i> and the Role of Synthesis	18
ELHANAN YAKIRA: From Kant to Leibniz? Salomon Maimon and the Question of Predication	54
MICHAEL ROUBACH: Salomon Maimon's Philosophy and Its Place in the Enlightenment: Wandering in the Land of Difference	80
PETER THIELKE: Intuition and Diversity: Kant and Maimon on Space and Time	89
YOSSEF SCHWARTZ: <i>Causa materialis</i> : Solomon Maimon, Moses ben Maimon and the Possibility of Philosophical Transmission	125
PART TWO: Empirical Skepticism	
GIDEON FREUDENTHAL: Maimon's Subversion of Kant's <i>Critique of Pure Reason</i> : There Are No Synthetic <i>a priori</i> Judgments in Physics	144
YARON SENDEROWICZ: Maimon's "Quid Facti" Argument	176
PAUL FRANKS: What should Kantians learn from Maimon's Skepticism?	200
FREDERICK BEISER: Maimon and Fichte	233
PART THREE: Unknown Work of Salomon Maimon	
FLORIAN EHRENSPERGER: Salomon Maimon als Rezensent, nebst einer bisher unbeachteten Rezension	249

APPENDICES

The Published Works of Maimon	263
Concordance	273
Abbreviations	281
Bibliography	284
The Contributors	293
Index of Names	295
Index of Subjects	298

PREFACE

Salomon Maimon died on November 22, 1800 (Kislev 5, 5560). To commemorate the two hundredth anniversary of his death, an international conference was held in Tel-Aviv and Jerusalem. The conference was co-sponsored by Tel Aviv University's School of History, The Franz Rosenzweig Research Center for German-Jewish Literature and Cultural History, The Edelstein Center for the History and Philosophy of Science, Technology and Medicine, both at the Hebrew University of Jerusalem, and by the Van Leer Jerusalem Institute. I wish to thank the respective directors of these institutions for their generous support, and Julia Matveev of the Rosenzweig Center for her cordial collaboration. Yitzhak Melamed and Oded Schechter were exceedingly helpful in planning the conference. I also wish to thank Jan Bransen for his helpful advice.

Carl Ebert edited the papers of the contributors whose mother tongue is not English; Florian Ehrensperger conscientiously checked the references and prepared the bibliography.

Most papers included in this volume are based on papers originally delivered at the conference.

Gideon Freudenthal
Jerusalem, March 2003
(Adar Beth, 5763)

A PHILOSOPHER BETWEEN TWO CULTURES

GIDEON FREUDENTHAL

1. *A Philosopher of No Persuasion?*

Salomon Maimon was a philosopher. But did he also develop a philosophy of his own? Or did he rather engage in “problem solving”, improving on the philosophies of others? This question has been discussed for two centuries already, but has yet to be resolved.¹

The issue is often circumvented with the claim that Maimon was the philosopher who opened the way from Kant to Fichte and Hegel. Thus his achievements can be acknowledged, while the question of whether he also developed a philosophy of his own loses its importance. In this perspective, the significance of his thinking derives from its telos, i.e., the philosophies of Fichte and Hegel, which it helped bring about, and not from its own merit.

This approach is unsatisfactory both on philosophical and historiographical grounds. If we do not share the view that the development from Kant to Hegel (via Fichte and Schelling) followed a “logical necessity”;² if, moreover, we are not even convinced that the philosophy of Hegel is an *Aufhebung* of its predecessors; then we have good reasons to consider all the contemporary alternatives in their own right, and not simply insofar as they prepared the way for Hegel. Without philosophical motivation, there is certainly no reason to engage in such teleological historiography. Maimon’s philosophy should hence be considered in its own terms; and in order to promote such a re-examination, I plan to discuss major

¹ “Maimon ist kein Systematiker. Ihm liegt die Analyse mehr als die Synthese, die Frage mehr als die Antwort.” Klapp (1968), 2. Engstler (1990) begins this discussion with reference to Maimon’s “eigenwilligen Anspruch, zugleich eine dogmatische und eine skeptische Position vertreten zu können” (ibid., 243). Engstler believes that Maimon was not a systematic philosopher, but rather a “*Problemdenker*” (ibid., 250-251), and suggests that this is due to his Talmudic heritage (ibid., 254-255). Beiser (1987; 285-323) attempts to synthesize a compromise position (ibid., 303-306).

² Kroner (1921), V.

hindrances to its interpretation, its “notoriously obscure” presentation, and its seemingly “paradoxical combination of rationalism, skepticism and criticism”.³

In particular, I will suggest that the difficulties in understanding Maimon’s philosophy are due to its unique inter-cultural character. I will propose that Maimon philosophized in the form of commentaries, as was common in pre-modern philosophy, and that reading these commentaries requires special hermeneutic techniques, usually unfamiliar to modern readers. Furthermore, I will argue that Maimon, who was already well-versed in medieval Jewish philosophy when he became acquainted with modern European philosophy, combined both traditions, and that the interpretation of his writings should take their inter-cultural nature into account.

2. *The Outsider*

Maimon was and remained a philosophical and a social outsider (both to Jewish-German and to German society in general), and these roles reinforced one another. At least one aspect of this constellation was well formulated by Maimon himself in a letter to Goethe:

My circumstances are quite well known. They are just as the circumstances of a man cannot otherwise be, who has no fortune, no profession, who practices no business or trade, who thoughtlessly fell in love with philosophy, wedded himself to it without first considering how he would support himself and philosophy. [...] I can also make no claim on no public teaching position. The novelty of the case in itself (since no one of my nation has yet ever held such a teaching position), want of language and diction, an original way of thinking very different from the usual, and the love of independence from everything that limits performance according to a particular norm put impediments enough in the way.⁴

³ Beiser (1987), 287

⁴ Schulz (1954), 272-288; the letter, 282-283. Maimon proves his point concerning “want of language and diction” in this very paragraph: the double negation in the penultimate sentence is grammatically wrong, and the German style of the entire letter is rather helpless. I am indebted to Peter McLaughlin for the translation of this paragraph, as well as for the text by Gerhard Lehmann, quoted below.

Maimon also knew that he paid a price for his exclusion from academic circles. He wrote with bitterness that Herr Reinhold was professor at a renowned university, whereas “*ich hingegen gar nichts bin*” (IV, 204; see also 208 and 261).

Maimon's autobiography and the anecdotes told about his lifestyle⁵ show that his eccentricity also excluded him from the cultural and literary circles in Berlin. Intentionally or not, he offended the civil conventions of hygiene, tidiness, and courtesy, as well as the ethics of supporting oneself and not being dependent on patrons; and thus he was eventually rebuffed by both the literary and academic sets.⁶

In addition, Maimon's attempts to collaborate with the *Haskala* (Jewish Enlightenment) circles in Berlin were of brief duration, and his projected (perhaps also written) Hebrew textbooks in mathematics and physics, which were announced in *Hameassef*, the organ of these circles, were never printed. Moreover, the publication of his Hebrew commentary to Maimonides' *Guide of the Perplexed* was halted after the issuance of just the first part. In spite of ample recognition from Kant, Fichte, and others, he did not fare much better as a German author. His first book in this language was judged too complex to be reviewed, and in the preface to his later *Logik* he deemed it necessary to address potential reviewers and thereby forestall the devastating criticism he expected — and it seems that the *Logik* was also his last publication to receive any notice worth mentioning. In later years and until his death, he lived on the country estate of his benefactor, Count Kalkreuth, in Silesia, remote from all centers of learning and Enlightenment, and his later writings seem to have been a cry in the wilderness. Most of his *opus posthumum* (both in Hebrew and German) was not published, and some of it was possibly lost or willfully destroyed. Maimon again received attention only with the rise of Neo-Kantianism, which brought some of his themes back

⁵ Salomon Maimon's *Lebensgeschichte. Von ihm selbst geschrieben und herausgegeben von K. P. Moritz. In zwei Theilen*. Berlin: Friedrich Vieweg dem ältern, 1792 und 1793 (I, X-588). Later editions and translations of this important autobiography are unfaithful to the original, and sometimes the alterations are extremely irresponsible. The text is usually abridged considerably, and the order of its chapters rearranged.

See also Wolff (1813).

⁶ Maimon's person comes into vivid relief when contrasted with Mendelssohn's. Mendelssohn came from a different, yet comparable, background, assimilated to German culture and was at home in both. So much so that he became a foremost representative of normative German Enlightenment philosophy. He was dubbed the German Socrates, while Maimon was very aptly called a "Cynic" philosopher. See Schulte (2002), 209-219. See also Freudenthal (2002b), 369-385.

into focus.⁷ He was rarely judged simply as a philosopher. His marginal position, his offensive appearance and behavior, his “coarse” manners, strange accent, and extravagant intellectual personality were often censured *en bloc*, and easily assimilated to the current clichés concerning the rootless, wandering Jew and the “Talmudist”. As a philosopher, *clochard*, and Jew, he frequently met with open aversion and hostility.⁸

3. *Maimon the Commentator*

A most insightful characterization of Maimon reveals both some peculiarities of his philosophy, as well as the historian’s prejudices:⁹

Of all those who pursued the critical philosophy, it is perhaps Maimon who has inwardly the least in common with Kant. Certainly, in the short career of his philosophical and literary production, Kant was his ‘point of departure’, but no differently than the Talmud, the Kabbalah, Maimonides, Aristotle, Locke, Leibniz, Mendelssohn — all the writings and writers on which he wrote commentaries. In every line Maimon betrays the entirely isolated thinker living in his own world, who, due to his origins and fate, is also excluded from the basic theme of Western philosophy. Maimon could never comprehend Kant’s freedom, nor the primacy of practical reason, nor the limitation of knowledge by faith. Superior to all others, even to Kant, in subtlety of argument and acuteness

⁷ Kuntze (1912a), 339 stressed the very close connection between Cohen and Maimon, which Cohen (1918), 540, however, attempted to play down.

⁸ One instructive example may suffice. Hermann Glockner, a former Nazi philosopher, dedicates (in 1958!) half a sentence and a footnote to Maimon, which masterfully invokes almost as many prejudices as it contains words, and in which he firmly advises that his philosophy be ignored. “Lesenswerter als alle philosophischen Schriften dieses polnisch-litauischen Talmudisten ist seine von K.Ph. Moritz herausgegebene Selbstbiographie (1792).” (Glockner (1958), 728) The necessary information for the qualification of Glockner as a “Nazi-Philosopher” can be found in Tilitzki (2002), 618-621. See also the following footnote.

⁹ Written in 1931 by Gerhard Lehmann, later a zealous Nazi philosopher. Lehmann’s text is of interest not because of his political views and conduct, but because of its excellence, and because it reflects many of the prejudices current even among people of opposite political persuasion until today.

The necessary information for the qualification of Lehmann as a “Nazi-Philosopher” can be found in Tilitzki (2002), especially 705-710 and 1130-1133. Tilitzki shows much understanding for Lehmann’s motives in becoming a Nazi-Philosopher (*ibid.*, 707) and qualifies his blatantly anti-Semitic book of 1940, *Der Einfluß des Judentums auf das französische Denken der Gegenwart*, euphemistically as “mit judengegennerischen Akzenten durchsetzt” (*ibid.*, 708-710).

of distinctions, he nevertheless lacks the ability to make distinctions needed for the profundity and seriousness of the problems: Rootless and roaming, his philosophy, like his life, comes down to "rambles"¹⁰. And yet it is he who anticipates the formalism of Fichte's *Wissenschaftslehre* and prepares the way for Schelling's philosophy of nature; it is he who harks back to Leibniz and points forward to Hegel, re-establishing, in his lack of tradition, historical ties which seemed destroyed, and inaugurating, in his independence, a new development of philosophical thought, in the pursuance of which he himself would be forgotten, until, finally, the most intimate contact of his problems with those of a later age would bring his personal achievement back to consciousness.¹¹

In modern philosophical culture (and perhaps until today), writing commentaries and writing systematic philosophy have been understood as mutually exclusive alternatives. This has been so since the beginning of early modern philosophy, with its pathos of rejecting tradition and beginning *ab ovo*, following only the guidance of experience and reason. In so-called traditional societies, the attitude is different, and during most of its history philosophy was indeed written in the form of commentaries.¹²

In Jewish lore, commentaries are the main form in which new knowledge is generated and conveyed: commentaries on the Bible and the Talmud, super-commentaries (i.e., commentaries on commentaries) on both, or commentaries on any other more or less canonical text. It is not surprising, therefore, that writing commentaries is Maimon's first and natural choice of medium for philosophical work, and also that he saw no contradiction between writing commentaries and philosophizing systematically. In a letter

¹⁰ "Rambles" stands for the German "Streifereien", an allusion to Maimon's book, *Streifereien im Gebiete der Philosophie. Erster Theil*. Berlin, 1793. It is also an excellent reference point for the cliché of the rootless, wandering Jew.

¹¹ Lehmann (1931), 31. Friedrich Kuntze, who observed this trait of Maimon's writings earlier (and noted it without anti-Semitic undertones), believed that Leibniz was more congenial to Maimon than Kant. He suggests that Maimon nonetheless wrote his commentaries to the *Critique of Pure Reason* because Leibniz did not write a systematic *opus magnum* to which he could contribute commentaries, and because Kant was the philosopher of the day. But Kuntze, too, thought that writing commentaries reflected a deficiency, a literary style adopted for want of power to write an independent treatise; he did not consider it simply a different style of philosophizing. See Kuntze (1912b), 285.

¹² Lehmann's remark on Maimon's "lack of tradition" is especially instructive (and droll, if we compare the respective lengths of Jewish and German written traditions). Belonging to a different tradition than one's own can easily appear as a lack of tradition.

to Reinhold (IV, 241) in which he affirmed that “it is my innermost conviction that my system is as completely elaborated as any other”, he also added: “I flatter myself that I can deliver the best commentaries on Hume, Leibniz and Kant”.

Concerning his first German book, Maimon said that he conceived a “system of coalition” (see below) as he wrote his commentaries to the *Critique of Pure Reason*, and also committed it to paper “in form of glosses and commentaries” (*Anmerkungen und Erläuterungen*; I, 557). Thus he explicitly states here that he both developed a comprehensive system and that he did it by writing commentaries. He further says that upon repeated rereadings of the text he found some loci unclear, and clarified them with notes almost as long as the text itself. “And since I am my own commentator, I dare say that I understood myself” (II, 334). Maimon hence wrote a commentary and a super-commentary to the *Critique of Pure Reason*. He also supplemented the book with a commentary on some paragraphs of Baumgarten’s metaphysics (under the title “My Ontology”).¹³ It can easily be shown that most, if not all, of Maimon’s writings were composed in the form of commentaries.¹⁴

When writing within the framework of Jewish culture, Maimon had not only the genre, but also the traditional form of commentaries at his disposal. His Hebrew commentary to Maimonides’ *Guide of the Perplexed* was published in the traditional form, i.e., printed in the margins of the page (together with a previously unpublished medieval commentary by Moshe Narboni), whereas the text of the *Guide* itself appeared in the center.

¹³ The literary form of commentary is also evinced in Maimon’s adding to the book an “appendix” on “Symbolic Knowledge”, dealing mainly with the literal and metaphorical meaning of language. I suspect that the essay (which was also independently published) was added as an appendix because in the *Critique of Pure Reason* (which famously does not consider language at all) there is no locus to which the essay could refer as a commentary. As Maimon says (VII, 639), his interest in this question goes back to Maimonides, not Kant.

¹⁴ I shall merely mention his commentaries to Aristotle’s *Categories*, to Bacon’s *Novum Organum*, and to Pemberton’s *A View of Sir Isaac Newton’s Philosophy*. The latter is of special interest since Maimon annotated the book with long excerpts from Kant’s *Metaphysical Foundations of Natural Science*, to which he wrote, in turn, his own (super-)commentaries. See Gideon Freudenthal, “Salomon Maimon’s Subversion of Kant’s Critique of Pure Reason”, in this volume.

An exception to writing commentaries seems to be the *Logik* of 1794. Nevertheless, in Maimon’s *Nachlaß* there was also a manuscript of commentaries on the logic of Kiesewetter; see Wolff (1813), last page (not numbered).

As Kuntze observed and Lehmann repeated, the choice of the text on which Maimon wrote his commentary could have been different. The choice, however, is not arbitrary. The commentator does not have to agree with the views of the text on which he writes his commentary, but a certain compatibility is requisite. His choice implies that the text is deemed important, that it touches upon meaningful issues, and that it is rich enough to warrant a commentary; it is, moreover, a declaration of belonging to the same tradition. It is no wonder that Maimon chose to write a commentary on Maimonides' *Guide of the Perplexed*, and not, say, on Yehuda Halevi's *Kuzari*; on Kant's *Critique of Pure Reason*, and not on Mendelssohn's *Phaedon*.¹⁵

4. *A Phenomenology of Commentaries*

Writing systematic philosophy in the form of commentaries on canonical texts and reading such commentaries requires specific techniques. The hermeneutics of commentaries derives from their subordination to the main text. The commentary is *ad locum*: it explains a word, a proposition, or an argument. This does not restrict the commentator to a certain topic; he can say something about the locus, and then digress to another topic which is merely peripheral in the main text or not even mentioned at all. The commentary is versatile in terms of possible topics, but it remains restricted to its own form: its structure and the order in which the ideas are presented are dependent on the main text, and the length of a commentary on a specific locus is also limited. Thus Thomas Aquinas justified the writing of the *Summa theologiae* with

¹⁵ Maimon's relation to Maimonides deserves a special study. His words in the introduction to the second volume of his autobiography (I, 307) may suffice here:

"My reverence for this great teacher went so far that I regarded him as the ideal of a perfect man and looked upon his teachings as if they had been dictated by Divine Wisdom itself."

The distinction between the traditional and modern form of writing philosophy is not clear-cut. Thus the emergence of Neo-Kantianism is also marked by the suggestion to turn to commentaries on a different canonical text:

"Die dem Aristoteles zugewendete verdienstvolle Arbeit hat reiche Ausbeute gebracht: sollte Kant, mit philologischer Genauigkeit behandelt, geringeren Ertrag erwarten lassen?" (Cohen (1918), XIII)

Much the same was already said by Cohen's predecessor F.A. Lange, as quoted in Vaihinger (1881), Motto.

the argument that an "*expositio*", i.e. a commentary, necessarily follows the order of the books on which it comments, which excludes a systematic presentation of doctrine, as is required for the training of novices.¹⁶

The commentator who wishes to elaborate his philosophy systematically may outline his position in the introduction and use cross-references between commentaries on different loci, thus enlarging the space at his disposal. But he cannot reverse the roles; he has to serve the main text; and even if he does not do so from the point of view of content, he has to in respect to order and form.¹⁷

Specific skills are also demanded of the reader of the commentary. He must understand the particular elucidations. But these require an (albeit imperfect) understanding of the general conception behind them, which is nowhere enunciated, only implied. In practice this means that the reader must keep in mind the expositions of all the loci and attempt to reconstruct the general conception in which they all cohere. He must develop hermeneutic hypotheses and corroborate or refute them by other loci. Thus his role is much more demanding than that of the reader of a systematic treatise; he has to reconstruct the system from scattered elements, whereas the latter finds them already assembled.

The commentator and the reader may hence collaborate: The commentator hints at links and contexts which point to his systematic view, and the reader, attentive to these hints, attempts to creatively reconstruct the general conception implied in the diverse commentaries *ad locum*.

This practice of writing and reading commentaries requires and develops certain intellectual abilities at the expense of others. It develops the ability to infer implications and implicatures of what is presented, to guess by analogy the author's position in one case from his position in another, different case, etc. However, the

¹⁶ St. Thomas Aquinas, (1948), Pars Prima, Prologus, 1: "... ea quae sunt necessaria [...] ad sciendum, non traduntur secundum ordinem disciplinae, sed secundum quod requirebat librorum expositio".

¹⁷ There is a certain ambivalence involved in the role of the commentator. On the one hand he assumes the humble pose of merely serving the understanding of the main text, but on the other he presumes to mediate between the reader and the venerated text.

systematic exposition of a conceptual system is not learned thereby. The system is always in the background, and only its partial instantiation — the commentaries on specific questions and loci — is visible.

Maimon was not merely trained to read texts this way, but also demanded these skills of his readers. Concerning his first German book, *Versuch über die Transscendentalphilosophie*, he claimed (I, 558) that he developed therein the systems of Spinoza, Hume, Leibniz, and Kant, such that their “point of unification can easily be arrived at”. This “point of unification” (*Vereinigungspunkt*) is the center of Maimon’s own “Coalitionssystem”. But he did not elaborate it, leaving this task to the reader. The reader of his *Transscendentalphilosophie* is offered commentaries on various loci of Kant’s *Critique of Pure Reason* and on theses of various other authors, and he is expected to figure out for himself their point of unification and the systematic view from which they all derive. Now, Maimon, of course, did not read only commentaries, but also “primary” philosophical texts; and it may seem that he should have learned about systematic exposition from these latter. However, his main source of philosophical education also uses a clearly unsystematic technique of presentation. Maimonides’ *Guide of the Perplexed* is famous for the intentional disorder of its arrangement. Maimonides addresses the reader of his *Guide* as follows:

Hence you should not ask of me here anything beyond the chapter headings. And even those are not set down in order arranged in coherent fashion in this treatise, but rather are scattered and entangled with other subjects that are to be clarified. For my purpose is that the truths be glimpsed and then again be concealed, so as not to oppose that divine purpose which one cannot possibly oppose and which has concealed from the vulgar among the people those truths especially requisite for His apprehension.

Hence, a special hermeneutic technique is required for reading the book:

If you wish to grasp the totality of what this Treatise contains, so that nothing of it will escape you, then you must connect its chapters one with another.¹⁸

¹⁸ Maimonides (1963), 7, 15.

Maimon uses almost the same words in arguing that Leibniz's doctrine of pre-established harmony is consistent with the philosophy of Spinoza. He believes that Leibniz concealed his true view, but that it can be reconstructed, "if we do not consider only isolated loci in Leibniz's writings, but connect all these which refer to the issue and contemplate them thoroughly" (III, 224-225).

Maimon calls his interpretation of texts "deciphering" and says:

Learning by deciphering constitutes still my peculiar manner of comprehending and judging the thoughts of others; and I maintain that [...] no man can flatter himself with having comprehended an author until he is roused by his thoughts, which he apprehends at first but vaguely, to reflect on the subject himself, and to work it out for himself, though it may be under the impulse of another. [...] For the same reason also I can understand a book only when the thoughts which it contains are consistent after filling up the gaps between them.

(I, 123-4)

Maimon uses the very same words to describe his study of the *Critique of Pure Reason*. As mentioned above, he says that he studied it as he had previously studied Spinoza, Hume, and Leibniz:

On first reading I obtained a vague idea of each section. This I endeavored afterwards to make distinct by my own reflection, and thus to penetrate into the author's meaning. Such is properly the process which is called thinking oneself into a system.

(I, 557)

Finally, we should also note the affinity between Maimon's technique and the content of his philosophy — first of all, his skeptical position, and then his attempts at a *philosophia perennis*. His position (see below) combined "dogmatism" and "skepticism", and the skeptical approach is very well suited to the form of commentary. The skeptic does not present theses of his own, but rather probes the claims of the "dogmatic" philosopher. He is dependent on an exposition of these knowledge claims, and writes his critique and reservations in the margins of the page, as it were. The seemingly parasitic usage of a main text is thus in accord both with the tradition of commentaries and with the skeptical content of Maimon's philosophy, which may have influenced his choice of this form.¹⁹

¹⁹ The dependence of the commentary on the main text can also be interpreted in light of the prejudice that Jews are not original, but, at most, interpreters

Furthermore, as I will argue below, the form of commentary and super-commentary suits Maimon's attempts at a *philosophia perennis*.

5. The "System of Coalition" and "*philosophia perennis*"

The specific way in which Maimon uses the form of commentary is also important for the understanding of the "*Coalitionssystem*" he attempted at the time of his first German book, and perhaps also later. From the Renaissance onwards, many philosophers have felt that the rejection of tradition comprised a threat to the coherence of the *globus intellectualis*. There abounded projects of encyclopedias, as well as of a common language to which all truths could be reduced irrespective of the specific jargon in which they had first been conceived; Leibniz, of course, is the best-known representative of this tendency.²⁰

It is noteworthy that Maimon's technique of commentary served this very same project without naming it as such. Thus, in the *Giv'at Hammore*, his commentary to the first part of the *Guide of the Perplexed*, in his treatment of chapters 68-69 and 73-74 (in which Maimonides also comments on the *Mutakalimun*), Maimon quotes *in extenso* Giordano Bruno, Mendelssohn (who comments on Spinoza), Blumenbach, Kant, and many others. He thus creates an imaginary community of philosophical discourse, wherein each text turns into a commentary, each commentary into a primary text, and the staged debate proves highly relevant to the most important discussion of the day: the controversy over Spinozism. The fact that all these texts are printed side-by-side and read together, detaches them from their respective contexts and transforms them into contemporary — or rather timeless — participants in a

(in various areas of culture) or simply parasites. An early remark along these lines is already to be found in Kant, who wrote to Reinhold that he cannot understand "...was aber z.B. ein Maimon mit seiner Nachbesserung der kritischen Philosophie (dergleichen die Juden gerne versuchen, um sich auf fremde Kosten ein Ansehen von Wichtigkeit zu geben) eigentlich wolle" (Letter to Reinhold, 28 March 1794; AA, XI, 476). Similarly, Fromer, (1911), 39, 41.

²⁰ Note that also Leibniz, the most prominent proponent of *philosophia perennis*, did not write a systematic *opus magnum*, and that his *Nouveaux Essays* is at least presented as a commentary of sorts to Locke's *An Essay Concerning Human Understanding*.

philosophical community. In Maimon's commentary, more truly than in any other modern literary genre, *philosophia perennis* was realized.²¹

It is in light of this practice that we should interpret Maimon's statement that since he read Kant after having appropriated the philosophies of Spinoza, Hume, Leibniz (and, of course, Maimonides), and seen that they all contain some truth, it was natural that he conceived a *Coalitionssystem* (I, 574, 557). It is no syncretism, but a philosophy that takes into account diverse intellectual trends. We could translate Maimon's words thus: "Since I am acquainted with more than one culture and tradition, I had to develop a conception that does justice to them all." The narrow-mindedness of the philosophical schools and sects could not satisfy his inter-cultural approach. And, indeed, he says of himself that he philosophizes in the manner of the Academicians, "who examine all ways of philosophizing and do justice to them all without following any of them in particular" (IV, 79). And he repeatedly criticized the Kantians, who believe that "Kant knows everything, and knows everything better than others and he alone knows everything" (VII, 568).²²

6. *Problems of Interpretation*

This inter-cultural character of Maimon's philosophizing should alert us to certain special problems involved in its interpretation. The presentation of one's own views in the form of commentaries or of a debate of an imaginary philosophical community, and similar techniques, is alien to modern culture, and makes it difficult to extract Maimon's own position. Sometimes (by no means always)

²¹ A much more modest enterprise, but one in the same spirit, is announced in the preface to Maimon's *Philosophisches Wörterbuch, oder Beleuchtung der wichtigsten Gegenstände der Philosophie, in alphabetischer Ordnung*, 1791. Maimon wishes not to commit himself either to Kant's system or to Wolff's (III, 18-19): "Mein Vorhaben bei diesem Wörterbuche ist keineswegs, die Gegenstände der Philosophie nach irgend einem bekannten Systeme in alphabetischer Ordnung zu erklären [...] sondern, die Gegenstände der Philosophie auf eine freie Art zu behandeln, wobei ich mich zuweilen diesem, zuweilen jenem System nähern, zuweilen auch von beiden abweichen, und dabei von dieser Abweichung den Grund angeben werde."

²² See also VII, 669; VII, 390; and the discussion in Engstler (1990), 243 sqq. For Lehmann openness to more than one tradition is tantamount to the lack of all tradition.

he concludes a discussion with a helpful *determino* (e.g., *Giv'at Hammore*, 166). Some comments, however, are *ad locum* only and must be considered together with others if Maimon's own views are to be faithfully reconstructed.

The inter-cultural character of Maimon's philosophy also entails certain disadvantages. As Lehmann observed, there were themes in Kant's philosophy that remained alien to Maimon. Still, I question whether Maimon never comprehended "Kant's freedom" and the "limitation of knowledge by faith", and also whether these are really "the basic theme of western philosophy".²³ However, it seems clear that Maimon did not share the conviction of "the primacy of practical reason", nor (we may add) did he understand the pathos of the Archimedean point of modern philosophy, namely, its proceeding from the *cogito*, from the "I". This is plainly reflected in Maimon's presentation of Descartes in his sketch of the history of philosophy in his commentary on Maimonides' *Guide*. He first refers to Descartes' overcoming of doubt (without reference to the *cogito* argument), and then he describes Descartes' physics — not his metaphysics. Lehmann's remark concerning the secondary role of Kant's ethics holds true not just for Maimon, but for Jewish "Kantians" in general. An explanation of this interesting phenomenon is still wanting.²⁴

A further difficulty in interpreting Maimon's texts also stems from the fact that he partakes of various traditions. We tend to read his texts on the assumption that they belong to the German philosophy of the Enlightenment and share in its vocabulary. But it is obvious that this need not always be the case. He may, indeed, use a term in this fashion, i.e., according to its meaning in the philosophy of the Enlightenment. But he sometimes uses it according to its meaning in medieval Jewish philosophy. Or he may synthesize their respective meanings. Or, finally, alternate between them. It follows that extreme caution and sensitivity are required in deciding his intention.

²³ Lehmann's opposition between "Schärfe der Distinktionen" and "Tiefe und das Gewicht der Probleme" reflects typical clichés of conservative thought. See e.g., Hoffmeister (1955), Art. "Scharfsinn" vs. "Tiefe". The qualifications which Lehmann applies — "entwurzelt, vagabundierend" — presumably allude to prejudices specifically concerning Jews.

²⁴ See Niewöhner (1977).

Consider one example only. Maimon repeatedly writes in praise of the “*Selbstdenker*”, the independent thinker, and accounts himself as one.²⁵

But what exactly does he mean? Is he referring to the ideal of Enlightenment as formulated in Kant’s famous dictum: “sapere aude! Have courage to make use of your own understanding! is thus the motto of enlightenment” (AA, VIII, 35)?²⁶

Or does he mean “the wise and able to understand by himself”, who alone may study mysticism on his own (Babylonian Talmud, *Hagiga*, 11b, 13a), and to whom Maimonides alludes when explaining that he presents his views in the *Guide* “scattered and entangled with other subjects”, so that the truth can be grasped only by “the wise and able to understand by himself”, while remaining “concealed from the vulgar among the people” (Maimonides (1963), Introduction p.6,7; cf. also I, 33; III, 5)?

And to which *Selbstdenker* does Maimon refer in his German autobiography when concluding the Spinozistic-pantheistic exposition of the *Guide* I, 68, 69 with the words that this exposition suffices for the “thinking reader” (*denkender Leser*, I, 366, 368). And which *Selbstdenker* does he have in mind when concluding his Hebrew presentation of the very same chapter (*Guide* I, 68) with the phrase, “but this suffices for the wise and able to understand by himself”? (*Giv’at Hammore*, 108) Is it the Enlightenment *Selbstdenker* or the medieval “wise and able to understand by himself” in both cases, in one of them, in neither? Or is it — in one or both cases — a synthesized meaning peculiar to Maimon?

Scrutinizing these possible meanings of *Selbstdenker* may seem petty, but the implications are far-reaching. If we adopt the Enlightenment reading, then we ascribe to Maimon the view that all humans are endowed with *lumen naturale* and are capable of participating in social culture; if we adopt the Maimonidean reading of the Mishna, then Maimon adopts an “aristocratic” view, according to which metaphysics is properly reserved to the learned few, and should remain esoteric and concealed from the general public. These truly opposite conclusions depend on whether we read Maimon according to the prevalent German or Hebrew

²⁵ See e.g., III, 455 and the letter to Goethe above.

²⁶ Kant (1996), 17.

semantics of the terms. And, if we adopt the *Selbstdenker* of Maimonides, then we may wonder whether the difficulties involved in interpreting Maimon are not intentional, and thus ascribe to him an esoteric philosophy. Important differences would also arise upon a careful reading of “perfection” vs “*shlemut*”, and many other terms.

7. *Rational Dogmatism, Empirical Skepticism*

Maimon characterized his philosophy as “rational dogmatism and empirical skepticism”. Most striking is his combination of both. He sets out to develop a daring speculative doctrine while emphasizing that it is founded on unstable ground. In *Tr* (II, 436) he said that he was — for the time being — the sole philosopher of this persuasion. It seems to me that the unbearable tension involved in grasping both horns of this philosophy (along with its ethical implications!) explains why he was also to remain so.

Maimon concludes his essay on the progress of philosophy (“Ueber die Progressen der Philosophie”) with an allegory which expresses this tension superbly:

Critical and skeptical philosophy stand in roughly the same relation to each other as Man and the serpent after the Original Sin, where we learn: “he [Man] shall bruise thy head” (that is, the critical philosopher will always vex the skeptic with the necessity and universality of the principles presupposed by scientific knowledge); “but thou [serpent] shalt bruise his heel” (that is, the skeptic will always taunt the critical philosopher by claiming that his necessary and universal principles find no application). *Quid facti?* (IV, 80)

The allegory is very apt. Remember, first of all, that, like Maimon’s philosophy, the biblical story revolves around the problem of knowledge. It is the serpent which introduces knowledge into the innocent world. And just as Maimon always compares human finite with divine infinite knowledge (claiming that in mathematics Man resembles God), so does the serpent in speaking to Eve (Genesis 3:5): “Your eyes shall be opened, and ye shall be as gods, knowing good and evil.” And remember that Kant (*AA*, IV, 260) says that Hume disturbed his “dogmatic slumber”. The phrases “to awaken from sleep” and “to open one’s eyes” can be used synonymously. And Maimon’s reference to the (divine) “infinite intellect” in denoting real knowledge finds its parallel in the snake’s words “ye

shall be as gods" (in Hebrew "gods", *Elohim*, became a proper name) to denote the knowledge which will be attained by Man. The reference to God's infinite intellect is explained by Maimon thus: In God conceiving and creating are one and the same act, and so are they also in Man's thought of mathematical objects. In this kind of knowledge there is never any thought-independent, "given" sensual object which could resist knowledge. Being and being-known are one and the same. Indeed, Rashi (R. Shlomo Yitzhaki, 1105-1040), the canonical medieval exegete, who was of course known to Maimon, comments on the phrase "ye shall be as gods" with the words "creators of worlds".

The biblical simile is violent. The skeptic serpent is crushed under the heel of the critical (i.e., Kantian) philosopher, while simultaneously biting him. In our case, both roles apply moreover to one and the same person, namely the Maimonian philosopher. For Maimon is not only the skeptic, but also the critical philosopher who invariably vexes the skeptic with the necessity and universality of principles presupposed by scientific knowledge. Maimon not only considered himself a "critical" (Kantian) philosopher, but also affirmed (*Logik*, V, 49, note i) that "transcendental logic was indeed founded by Kant, and, if I may flatter myself, completed by me." And, of course, he is also the skeptic philosopher. Thus he conveys in this biblical allegory a rather telling account of his philosophy as consisting of a basic tension between constructing and undermining, between erecting *a priori* the entire conceptual fabric of human knowledge, and then injecting the doubt as to whether it applies at all to our world.

I will not discuss here whether this is Maimon's last word, or whether he conceived of a "third way" to synthesize the opposite alternatives within his philosophy. It is, however, clear that constructing such essential tensions is a hallmark of Maimon's and intrinsic to his philosophy.²⁷

The philosophers of German Idealism may have taken much from Maimon. But it is obvious, I believe, that the entire character of his philosophy is the very opposite of the German philosophy that followed him — and Maimon, who witnessed the beginnings of this development, was also of this opinion. His philosophy,

²⁷ This aspect of Maimon's philosophy was stressed by Bransen (1991).

therefore, cannot be integrated into a development "From Kant to Hegel" (Kroner) without doing violence to it. The question is whether the alternative is of historical or also of philosophical interest, whether we only want to "do justice" to Maimon, or whether we can still learn something beneficial to our own philosophizing? Of course, I will not attempt to give an answer to this question here.

However, it seems to me that the greatest benefit arising from an encounter with a different culture or a different philosophy is the loss of the sense of the "obvious" concerning our own culture and philosophy. If we allow ourselves to give up our security and question the givens of our culture, we may learn something new about it and ourselves, and perhaps also something from other cultures. I believe that the encounter with Maimon can still yield such productive insecurity. Moreover, the encounter with his philosophy — speculative and yet skeptic, sensitive to tradition and yet inter-culturally oriented, a philosophy which suffers strong tensions and paradoxes without enforcing their reconciliation — may prove as thought-provoking as ever.

THE LOGIC OF SPECULATIVE PHILOSOPHY AND SKEPTICISM IN MAIMON'S PHILOSOPHY:

Satz der Bestimmbarkeit and the Role of Synthesis¹

ODED SCHECHTER

Maimon stressed the importance of the *Satz der Bestimmbarkeit* (the Law of Determinability) within his system on several occasions, remarking, for instance, that “the law of determinability is the highest principle of all real thinking” (VII, 148), or “that it is the highest principle of any synthetic thinking which determines objects” (ibid., 202).² However, despite these forceful assertions and the fact that he devotes considerable portions of some of his books to the topic, his statements remain vague, since he is primarily concerned with a technical description of this law, and refrains from discussing its role within his system. This is partly due to his style of writing, in that he avoids a clear presentation of the general structure of his ideas. The purpose of this paper is twofold: first, to present and explain the Law of Determinability (henceforth, LOD); and, second, to discuss its far-reaching implications for the whole project of Maimon’s philosophy.

The second part involves three basic stages. In the *first* I suggest that the way in which Maimon characterizes his own philosophy as a combination of dogmatism and skepticism (I, 436-437) arises from his special understanding of logic, which, in turn, rests on the LOD. In the *second* I contend that Maimon thinks we can attain to a picture of how real knowledge should appear, and how it is derivable from transcendental logic; at the same time, however, this knowledge remains unrealizable. In the *third* I argue that Maimon’s was the very first to think through the possibility of

¹ This paper is based on my Masters Thesis, which was written under the dedicated supervision of my teacher and friend Prof. Gideon Freudenthal, whom I would like to thank wholeheartedly. In addition, I would like to thank my friends Yitzhak Melamed and Adi Shelezniyak for their help.

² Maimon interpreters repeat this claim as well. For instance, Kuntze (1912a), 48, claims that the LOD is the “center of gravity of the whole system”.

speculative logic, which was later developed mainly in the speculative philosophy of German Idealism. To understand this double approach to knowledge is also to understand why Maimon rejects this possibility in advance on philosophical grounds.

It is not my intention to give an historical account of Maimon's influence on German Idealism, but I think the present approach will serve to defend him from the accusation that he abandoned the achievements of critical philosophy by turning back to Leibniz. I will try to give substance to Fichte's famous declaration, contained in a letter to Reinhold: "My respect for Maimon's talent knows no bounds. I firmly believe that he has completely overturned the entire Kantian philosophy as it has been understood by everyone until now, including you, and I am prepared to prove it. No one noticed what he had done; they looked down on him from their heights. I believe that future centuries will mock us bitterly" (Fichte (1988), 383-384). It is usually assumed that Fichte was referring to Maimon's skepticism. But I believe that more was involved, and that Fichte recognized that his own philosophical approach was deeply indebted to Maimon.

The Law of Determinability: General Characterization

In very general terms, the LOD is the law of synthetic thinking. It should already be observed that "synthesis" is of key importance for understanding Maimon's philosophical undertaking. Synthesis, he contends, is the form of any thought which determines objects, or what he calls a *real* thought. The LOD reflects the form of relation between the subject and the predicate of a judgment in terms of "real thought". The relation between them can take different forms. There are basically two kinds of compositions: one produces "a correlative concept", the other "an absolute concept". A *correlative concept* is the result of a composition both of whose elements are mutually dependent. As such, each element can serve either as a subject or as a predicate. The pair "cause and effect" exemplifies a correlative concept, i.e., neither element gains meaning³ without

³ I use the expression "to gain meaning", though Maimon himself does not use it in the present instance. However, he employs the term 'meaning' (*Bedeutung*) on other occasions (concerning the reduction thesis in relation to the notion 'true') which will be discussed later in this essay. The reason I choose this

an immediate relation to the other element of the composition (II, 86).⁴

The *absolute concept*, which is of particular interest to Maimon,⁵ is the result of a synthesis which fulfills the conditions set by the LOD. The hallmark of this synthesis is that the subject is independent of the predicate, whereas the predicate cannot be thought without the subject (ibid., 84). For instance, we can think a triangle without thinking the predicate “right-angled”, but we cannot think the term “right-angled” without relating it to some subject (ibid., 84). Maimon calls the subject “the determinable” (*Bestimmbares*), the predicate “the determinant” (*Bestimmung*), and the whole synthesis “the determination” (*Das Bestimmte*). In so defining the relations, he maintains that we cannot predicate something,

expression will be partly clarified when we deal with discursive thinking. But it is worth mentioning here that Maimon formulates the LOD in two ways with regard to the role of thinking. Sometimes it is formulated as if a predicate (correlative or absolute) is what cannot be *thought* without a subject (II, 84-87). Elsewhere it seems that the role of thinking is secondary to the logical possibility of a combination (ibid., 378). Maimon’s commentators tend to accept the relation between thinking and the LOD without further qualifications, and to choose the first option (cf. Bransen (1991), 110; Potok (1968), 103). So far as I can see, it can be understood only if we take into account another term, the “consequence” (*Folge*). Every new synthesis which is a “real” synthesis has new consequences which cannot be derived from the former synthesis. That is to say, it cannot be derived from the subject-concept (again, one should be careful here not to conflate “subject” with the “subject-concept”). In brief, the former as it appears to us in intuition, the latter is how it is formulated in accord with the LOD). For Maimon there is only one way to differentiate between two terms which comprise a synthesis, and this is by looking at their consequences. If we follow this lead, then we can understand that the role of thinking in the definition of the LOD is a secondary one. The dependence of a predicate on the subject is due to the logical dependence of the predicate term when dispensing with the subject in an absolute concept.

⁴ Maimon claims that concepts like “cause and effect” represent a relation which is grounded in identity and based on definition. He considers the claim that it is necessary for each cause to have an effect the very definition of this relation (II, 37). At a later stage, however, he revises his view and asserts that this correlative relation is not an analytic, but rather an analytic-synthetic judgment (VI, 78, 156; cf. Bergman (1967), 110n. 29). Although it is beyond the scope of this paper to discuss judgments of this kind, I believe that Maimon’s reason for introducing this new category (analytic-synthetic) will become clearer if we can grasp his criticism of Leibniz. This issue will be treated in the second part of this essay.

⁵ Maimon argues that for an infinite intellect correlative concepts are absolute (cf. II, esp. 86-87). This distinction between an infinite and a finite intellect will occupy our attention later.

unless there is some inherent connection between the subject and the predicate. In a way this dependence is reflected in the grammar of language; thus, for instance, Maimon says that we use the expression “the black table”, but not the “tablish black”. Why can we not use the latter? Because in this composition only “the table” can serve as the determinable, whereas “the black” by itself has no meaning (ibid., 377-378). The latter is possible only as a determinant of the former. Up to this point, Maimon’s conceptualization is not opposed to the tradition inherited from Aristotle, but it already intimates another route.⁶ As Maimon claims, “the subject is this part of the synthesis which makes up or comprises a synthesis by itself, and for that reason it is possible to think it by itself with no reference to the other part of the synthesis. The predicate, yet, is the other part, which by itself does not comprise or make up any synthesis, and therefore it can be thought only as an element of a synthesis but not as an object by itself” (ibid., 378). It is important to observe, first of all, that for Maimon the synthesis has priority over the concepts of subject and predicate. As he formulates it, a subject is “synthesis in itself”, whereas a predicate “is not a synthesis in itself”. Secondly, this passage suggests that a synthesis in itself (a subject) can be thought in itself (which is not true of the predicate). Maimon here equates the subject with synthesis. For him, every subject is a synthesis. The definitions of a subject and a predicate are formulated in various places in relation to the “synthesis”.⁷ This point will become clearer in the final section of this essay. But what we have already seen allows us to state that the relation between a subject and a predicate should be interpreted within the framework of “synthesis”, i.e., of a concept, and not in that of a judgment. The status of judgments will be discussed in the second section.

⁶ It is beyond the scope of this paper to discuss the relation of Maimon to Aristotle in general, and the relation of the LOD to Aristotle’s characterization of subject and predicate in particular. Cf. Bergman (1975), 139-140; Nacht (1953), 203-218.

⁷ Maimon rejects other logical distinctions which could be useful in characterizing the difference between subject and predicate. He claims that distinguishing them by their level of generality is unhelpful. If the subject is the particular and the predicate is the general, then why do we refer to the concept table, for instance, as if it were a subject while roundness is considered a predicate? Could the table not be the general term which is particularized as round, square, etc. (II, 377-378)?

This approach towards the relation has serious implications, which will be addressed in the second and third sections of this essay. At present, it can be said that a synthesis either rests in some definite way⁸ on this asymmetrical relation, or we produce mere nonsense: e.g., Maimon cites “a sweet line”. Insofar as the absolute concept is concerned, the main structure of the LOD comprises this form of asymmetrical relation between a subject and a predicate within the framework of synthesis.

The asymmetry of the law has a number of philosophical implications.⁹ Here I will mention two which are important for our discussion:

1. According to Maimon, *every predicate can relate to only one subject* (II, 86-87, 379). Although, by definition, a predicate has to be thought in relation to some subject, this statement precludes the idea that it can be attributed to several different subjects. Maimon admits that this seems to be paradoxical (II, 380), but he insists on it, claiming that it is an outcome of the LOD. Only one determinable can be combined with each determinant. The determinant and the determinable thus stand in a *unique relation* to one another. By rejecting the common-sense view, Maimon likewise rejects the idea that a predicate can gain its meaning by the combination *alone*, while ignoring a specific determining-relation between *this* particular subject and *this* particular predicate (assuming that the predicate can be attached to this or that subject, and that it does not transgress the boundaries of a genus). The usual view, which allows a predicate to be related to different subjects, suggests that it is independent of the subject. As such, one can think of the predicate “round” as having meaning by itself, but it cannot “be” a real object unless it is attached to some subject. Comparing this to Maimon’s view — whereby the predicate can be attached to only one subject — implies a different perspective of the predicate’s status. For Maimon the predicate is not free-floating, and its meaning cannot be grasped by itself. It is not the predication which entails the subject; to be ‘something’

⁸ The definite way of comprising a synthesis is twofold. This point will be discussed later.

⁹ The metaphysical implications of this asymmetry will be at the focus of discussion in the next two chapters.

the understanding can apprehend demands a relation to its subject. For there are no free-floating concepts which are combined by the understanding in a synthesis. Were it possible for one predicate to be related to different subjects, we would have to take the predicate as something which to some extent can be thought by itself, outside the synthesis. This means that it is distinguishable from the subject. For Maimon this is possible only in formal logic, where concepts are treated as symbols and governed by the laws of identity and contradiction. Not, however, in transcendental logic, if we accept his condition of the LOD that differentiates the subject and the predicate by dint of their dependence relation.

In order to show that a determinant can have only one determinable concept, Maimon provides us with several proofs based on the LOD. Though each of these scholastic proofs demands a thorough investigation, I will dwell on them only briefly, in order to gain a better grasp of the status of the predicate in a synthesis, as expounded by Maimon. The proofs mentioned here make use of his idea of consequences; they demonstrate that it is immaterial whether we assume the consequences of those syntheses to be the same or different; if we allow one predicate to be shared by two different subjects, we contradict the LOD.

1. *Proof from the difference of consequences* — granting that for each real synthesis there are new consequences. Assume two syntheses AC and BC, which share the predicate C. Based on our first supposition, these two syntheses should have different consequences. Where does this difference of consequences come from? It cannot come from C, being the same in both cases. It cannot come from A and B, since, if so, it would be the consequences of A and B by themselves and not of the new synthesis. Furthermore, Maimon claims, there is no reason to assume that it comes from the synthesis itself, since there is nothing more in a synthesis than its constituents.

2. *Proof from the identity of consequences* — granting two syntheses, which share the same consequences. Assuming that two clearly distinguished things cannot be a ground for the same thing (which is self-evident in Maimon's opinion¹⁰), we must look for the

¹⁰ This assumption is itself problematic for Maimon, and here he finds it necessary to establish the unique relation between "difference" and "opposition".

ground of identity in one of their constituents. Either it is something the subjects share, whereby we admit that there is *one* subject at the bottom of these syntheses. Or, if the subjects are different, the ground should be the identical predicate. But this is to claim that the predicate has consequences which can be grasped by thinking the predicate alone. However, by the LOD, this would imply that the predicate is actually the subject, since what can be thought (and has consequences — which is the same for our purposes) by itself is a subject.¹¹

In consequence of this proof we can say that a synthesis requires more than a possible relation between a subject and a predicate; it rather stresses the impossibility of thinking (in real thought) a predicate independently of a subject. Apart from the other far-reaching implications of this claim (that only one subject can be attached to each predicate), it is already clear that real thinking which determines objects, a synthesis, entails the assumption that the predicate should have a unique relation to a specific subject. A synthesis is never just a composition of two terms, but a process of generating new objects (actually new syntheses, as we shall claim below). Nothing in the synthesis comes from “outside”, and the predicate is totally dependent on a specific subject. Maimon’s concept of synthesis is bound up with the idea of how one concept, a synthesis, should originate in another synthesis. At this stage the claim remains vague, but it will become clearer when Maimon’s concepts of synthesis and construction are examined.

2. Maimon argues that *in any synthesis, only one predicate can refer to the subject* (II, 143; V, 245-246). A synthesis that appears to comprise two different predicates of one subject is a mere figment of the imagination, and Maimon calls it *arbitrary* thinking. For example, a right-angled equilateral triangle should be analyzed, according to Maimon, in the following way: “right-angled” is a determinant of the angle, whereas equilateral is a determinant of

This relation is of crucial importance for him, since he considers *difference* and not *negation* at stake in transcendental logic, and he suggests that the opposition should be reduced to the former and not the latter (II, 380).

¹¹ The proof from consequences is discussed in II, 88-89, 379-380. Maimon also offer a proof from intuition (*ibid.*, 90-93). He suggests still another from the difference of the subjects (*KdA*, VI, 20).

the sides (V, 246).¹² This principle is meant to insure that a composition is not *arbitrary*, but rather reflects a kind of necessary relation between the subject and the predicate in a synthesis.¹³

Both these principles reflect a similar concern on Maimon's part, but they can be distinguished from each other. Whereas the principle that attributes a predicate to one subject only emphasizes the importance of the predicate's dependence on the subject and excludes the possibility of free-floating concepts, the second

¹² Bergman considers Maimon's point here to be problematic. If each subject can have only one predicate at a time related to it, then Maimon's solution does not resolve the problem, but pushes it one step further. If the predicate "right-angled" is a predicate of an angle, and 'equilateral' is a predicate of the sides, then we are left with the same question: How are these two lines of determination to be related in one triangle? It seems that *any* concept of triangle which encompasses both concepts of angles and sides is doomed to violate this condition (Bergman (1967), 80). I will refrain from dwelling on this issue here, yet it should be stressed that Maimon rejects the idea of an arbitrary synthesis to the extent that even geometry — one of his prime examples of a field which complies with the LOD — is not saved. The next note discusses the relation of the LOD to the idea of arbitrariness, and the status of Maimon's proof of this claim.

¹³ Cf. V, 246. The proof Maimon offers of this proposition seems to rely on the principle of "sufficient reason" (II, 143). In brief, it assumes two predicates B and C: Suppose it is possible to think both of them in relation to only one subject A, then the synthesis, according to Maimon, is an arbitrary one. Nothing necessitates our thinking them together. Which kind of necessitating is Maimon looking for here? Why should it be *necessary* to think both of them together in order to render it "possible"? Provided that it is possible to think each of them in different syntheses in relation to the subject term alone, we should understand this kind of necessity of which Maimon speaks in a different form. I think that what he has in mind should be understood again in reference to his fundamental idea that synthesis is not some kind of "possible" composition. This would be enough in formal logic. If, however, we take the synthesis to be the vehicle of "real thinking", then it should reflect the "procedure of production". Thus, it should comply, for instance, with the idea that each new synthesis has new consequences — something that this double-predicated-synthesis does not reflect. Composing two different syntheses and uniting them into one conflated synthesis does not reflect any genuine work of the understanding, merely the fact that there is no logical contradiction here. But the absence of contradiction cannot account for what synthesis is or what justifies its production. We shall return to this point in discussing Maimon's idea of synthesis and his alternative definition of it. It is worth noting that the proof Maimon offers for this claim differs from the kind of scholastic proofs he gives for the claim previously under discussion. It does not contradict the LOD directly, but it violates the philosophical understanding of what the LOD is. We should be aware that, according to Maimon, an arbitrary synthesis is not something that cannot be thought, in that it leads to a contradiction. It is rather something which fails to comply with the account of the procedure of production of a synthesis. We shall have more to say about this later.

principle, and specifically its proof, emphasizes the idea that a synthesis is a unitary whole, i.e., a synthesis should provide its own *raison d'être*.

In addition, there are three other issues, which are relevant to our exposition:

1. The “conclusion” (Folge) of the synthesis (II, 90, 379, 385-386) — How can one differentiate between a subject and a predicate? Symbolic cognition allows us to distinguish between the two in a problematic manner. Thus, if we think of a synthesis of A and B, even under the condition of the LOD, which affords the possibility of thinking B by thinking A, symbolic cognition allows us to abstract this synthesis and to think each of the elements in isolation. But this privilege is granted neither in real thinking (where the object is determined *a priori*), nor in intuition. We can never tackle a triangle that is not determined in a specific way. What, then, allows us to make a distinction between subject and predicate which is not a formal one and which refers to a determined object? Or, in the event that we are concerned with objects in intuition, how can we decide what is a subject and what is a predicate? Maimon introduces here his idea of the “conclusion” (Folge). For instance, a conclusion of a triangle is the claim that the sum of its angles is 180 degrees. This conclusion is valid for every triangle. The way this triangle is determined has no impact on that conclusion. However, a figure in which the sum of two of its angles is 90 degrees is a right-angled triangle. The conclusions can inform us as to the relation of dependence. Thus, although in intuition we can think neither the triangle by itself with no determination, nor the right angle with no reference to a triangle, we can still see a determined relation between those conclusions. The element of a synthesis related to a conclusion which cannot be omitted is the subject, whereas the element whose conclusion can be omitted without interrupting the possibility of thinking the other conclusion is the predicate.¹⁴ A few remarks should be added here. *First*,

¹⁴ Maimon claims that, in fact, the *only possible way* to distinguish between a subject and a predicate is by referring to their conclusions. As he formulates it, discerning the subject and the predicate and deciding their logical status, is something that can be achieved only by a mediated procedure, i.e., by referring to their conclusions (II, 244-246).

for Maimon, every new synthesis, or every determination of a concept, entails new conclusions.¹⁵ *Second*, according to Maimon, conclusions are equated with reality (*Realität*), and thus the subject has more reality than the predicate. The former has conclusions by itself and comprises the ground for conclusions, which, in turn, can be derived from a new synthesis which is enabled only in relation to this concept. The predicate, by contrast, has conclusions only because it is comprised in a synthesis with a subject, and it has no role so long as the conclusions of the subject are at stake. Thus, the subject's reality is that of itself and that which it renders possible, whereas the predicate has only dependent reality, which is accorded in a synthesis (II, 88).¹⁶ *Third*, different syntheses generate different conclusions.¹⁷

2. The relation between judgment and concept — the reduction thesis: The relation between judgments and concepts is dependent on the LOD. This issue is of crucial importance, but has not been adequately appreciated. The reduction thesis claims that forming concepts and composing judgments comprise the same act, *whereby one is the reverse of the other*. Forming a new concept is *synthesis*; composing a judgment is *analysis* (I, 93). A concept is formed by a synthesis which is governed by the LOD (as shown above). In creating a concept, the intellect moves from the general to the particular (for instance, from a triangle to a right-angled triangle). The opposite obtains in the act of judging, where the intellect

¹⁵ Maimon claims that the color of a triangle is not a determinant, there being no new conclusions from this synthesis, and “only that, that by adding it to the determinable gives ground for new consequences, is a determinant. The black color, the time and place (*Ort*) of a triangle do not enable any new consequences, and therefore they are excluded from the scope of the determinants” (II, 391). Kuntze understands Maimon in the same way: every new determination implies new conclusions (Kuntze (1912a), 59). Maimon does not justify this point; he takes it to be self-evident. But unless we accept it, the whole idea of differentiation introduced here is impossible. If there is no guarantee that each new synthesis has new conclusions, how could we take this algorithm for distinction to be exhaustive? What could justify such a claim? I am not sure there is any “proof” for it. But when we consider Maimon's thesis regarding the reductive character of judgments, his claim will be rendered more plausible.

¹⁶ This equation of conclusions with reality might seem awkward at this point, but the following discussion of what synthesis is will elucidate this issue.

¹⁷ This is mentioned only in the proof from the above-discussed indifference of conclusions. Maimon claims there that “every one would grant me, I hope, that different grounds cannot imply the same conclusions” (II, 90).

shifts from the particular to the general (*ibid.*).¹⁸ These respective acts of the mind are apparently of different sorts, but in fact, Maimon claims, this impression is due solely to the different designations employed, *because concept and judgment are one and same* (*ibid.*). How should we understand this thesis? At its basis lies the LOD once again. Maimon distinguishes between two kinds of judgments, yet both can be analyzed equally in relation to the LOD. The first is a judgment whose purpose is to discriminate between the predicate and the subject in a given synthesis. For instance, the judgment “man is an animal” can serve us as follows: Though I might know that the synthesis “man” is comprised of “animal” and another element, it still remains unclear as to whether the animal is a subject or a predicate. The judgment, thus, guides us in recognizing that the animal is the subject of the synthesis, and the other element (implicit in this kind of judgment) is the predicate. The outcome or the determination is the synthesis “man”. It is useful since it enables us to realize which of the terms has consequences by itself and which, by contrast, has them only in this specific synthesis. The second kind of judgment discloses something else: a “clear” (*klar*) thing is rendered into a “distinct” (*deutlich*) one. For instance, the concept “man” can be clear to me, and yet it is not distinct. For a concept to be distinct, I have to know, according to Maimon, what *follows* therefrom. The judgment “man is an animal” provides us with a clear concept, since it reflects the relation of determination, i.e., “man” is a determination of the determinable “animal”. It immediately follows that any consequence attributable to the subject “animal” can also be attributed to the concept “man” (II, 384-387).¹⁹ To sum up, the reduction thesis interprets judgments in terms of a synthesis under the conditions of the LOD. A judgment has no genuine status. As Maimon understands it, transcendental logic deals with real concepts, whereas judgments represent a kind of mirroring of this activity. It is important to stress again that the outcome of combining concepts is not a judgment (as many claim), but a synthesis.

¹⁸ Thus, what is considered a subject term in a synthesis is actually the predicate in a judgment, and vice versa.

¹⁹ Maimon qualifies this possibility of transforming a concept from the realm of the “clear” to that of the “distinct” as a restricted one (II, 384). This will become more meaningful when we discuss his idea of the discursive.

There is no unique logical status to the judgment. The outcome, examined in the following section, is a radical one.²⁰

3. Truth and falsity — Traditionally, the judgment was considered the vehicle of truth and falsity, but Maimon's claim that "the concept and judgment are one and the same" (II, 93) leads to a radical reappraisal of the notion of truth and falsity. According to Maimon, I believe, the concepts of truth and falsity are not genuine *logical* terms. Judgments, which are actually analytical mirrors of synthetic concepts, reflect only the procedure of concept formation. To put it otherwise, a concept can be formed rightly and wrongly; a concept which has been composed wrongly is actually nothing at all. And thus Maimon claims (*ibid.*, 145):

...a right-angle triangle is a *true concept* [*wahrer Begriff*] since in this expression I think the triangle as something determinable in a real manner, and the predicate "right angle" is thought as its determinant. I grasp [*einsehen*] by it the unity and the real combination of a subject and a predicate (determination and determinant). Thus, this expression has *meaning* [*Bedeutung*] and *hence* it is true.

Maimon speaks here of a true concept, not of a true judgment. "Meaningful", moreover, implies truth. For an expression to be meaningful, it has to be formed in accordance with the LOD. In order to further clarify this claim, Maimon stresses a few points. First, insofar as thoughts (*Gedanken*) are concerned, there is neither a true concept nor a false one. It is rather that the concept is well-formed, or it is not a concept at all (II, 147). Second, the notions 'truth' and 'falsity' are not related primarily to thoughts, but to signs. Stated succinctly, Maimon contends that to say of some expression that it is true is actually to affirm that the corresponding thought is a concept which has been composed in accordance with the LOD. And, thus, thoughts are not directly related to truth or falsity, but rather definable as well-formed concepts or ill-formed ones. Truth is then a kind of relation between signs and thoughts. If an expression reflects a genuine synthesis, we call it a true expression; it is not a judgment, in the traditional

²⁰ At this point one can claim that Maimon fails to give an exhaustive account of judgments and propositions, and, indeed, such might well be the case. Nevertheless, this comprises one of his crucial steps towards his general notion of logic, to be discussed below.

sense, but an expression, such as “right-angled triangle” (ibid., 145). Maimon further claims that there is truth and falsity neither in relation to thought nor in relation to the signs. A false expression is actually something which has no meaning, there being no thought which can correspond to this expression. And thus, Maimon claims: “falsity is the opposite of that, that is to say, an expression with no corresponding thought, *and yet, we claim that there is a corresponding thought for this expression,*²¹ since otherwise this expression would be an empty sound” (ibid., 147-148). In the realm of thought there is no truth and falsity. Concepts, formed in accordance with the LOD are *ipso facto* meaningful, and hence these concepts and their corresponding expressions can be designated true ones (ibid., 145). As Maimon says: “when I say: a triangle has three angles, I express by it something I truly think, i.e. I am saying the truth; and the opposite is false. But, in relation to the thoughts, there is neither truth nor falsity — there are just thoughts or no thoughts whatsoever” (ibid., 405). It is thus clear that Maimon rejects the traditional view of the relation of a judgment and its truth-value. The role of truth is transferred to the question of the relation of expressions and thoughts. In Maimon’s opinion, logic deals with concepts and not with genuine judgments; and by integrating it with the LOD, the result is that only the procedure of concept formation, i.e., the synthesis, is taken seriously. The reduction thesis is thus the ground for the abolition of the traditional role of truth in Maimon’s philosophy. Indeed, in the realm of thought we have only true concepts, which are well-formed syntheses, or nothing at all. In the realm of natural language, we either have expressions which properly reflect the determination procedure, and thus warrant the description “true”, or expressions which do not represent any thought at all. The

²¹ This idea that truth is a relation between thought and expression is not elaborated further by Maimon, insofar as I am aware. The claim that a false expression is actually something we ‘pretend’ to believe has a corresponding thought, although it has none, is one that elicits many questions, but here, too, Maimon neglects to elaborate it. It is, indeed, beyond the scope of this paper to give an exhaustive account of this issue. For our purpose it is mainly important to note that, according to Maimon, truth does not stand in any relation to judgments, and that a concept is either well-formed or nothing at all. He acknowledges another kind of truth — formal truth — which is based on the law of contradiction. Since, however, it does not deal with the issues of real thought, transcendental logic, or the LOD, it is of no interest for us here (cf. II, 148-150).

latter are named “false”, but for Maimon they really convey no meaning whatsoever. The reduction thesis, and Maimon’s idea that we are dealing only with the procedure of concept formation, is part of what I will later claim to be the delineation of the possibility of speculative thinking.²²

I will now discuss Maimon’s critique of “synthesis” in Leibniz and Kant, and then show the consequences of this critique for knowledge and metaphysics.

The Critique of Leibniz and Kant: Maimon’s New Definition of Synthesis

Maimon notion of *synthesis* underlies his critique of Leibniz’s *praedicatum inest subjecto* principle and of Kant’s division between analytic and synthetic judgments.

A brief discussion of Maimon’s distinction between formal and transcendental logic is unavoidable. There are three kinds of thinking, each of which has its own realm and its own rule. *Formal logic* is governed by the law of contradiction (and identity) and includes every possible object; one looks at objects in general, i.e., objects which are not determined in any definite way. *Transcendental logic* deals with objects determined *a priori*, and is governed not only by the negative law of contradiction, but by a positive law of combination, and this, according to Maimon, is the LOD.²³ The

²² To the best of my knowledge, Maimon’s commentators have neglected both these points. Thus Kuntze and Bergman have very little, if anything, to say about the reduction thesis with respect to the role of truth in his philosophy. Buzaglo, for instance, overlooks these ideas, and hence find some of Maimon’s concepts puzzling. In order to explain the relation between concepts and “truth”, he tried to interpret Maimon’s “concept” in terms of propositions. Thus he says: “Maimon’s criterion raises some questions [...] The meaning of the expression ‘a concept which has consequences’ raises a known difficulty. Consequences are derived from propositions and not from concepts” (Buzaglo (1992), 268). The same applies to Buzaglo’s interpretations of Maimon’s idea of true and false concepts. His solution, once again, is to attribute the truth-value to the proposition, whereby such and such a concept occurs. Ignoring the reduction thesis and therefore the relation between judgments and truth-values creates this dilemma (cf. Buzaglo (1992), 268-269).

²³ Maimon claims that formal and transcendental logic are mutually dependent. This is beyond the scope of this essay. Transcendental logic is dependent on formal logic in a negative way, i.e., the law of contradiction cannot be violated. By contrast, formal logic, if it is to make any progress beyond the law of contradiction or identity, is in need of transcendental logic. For example, even the

third realm of objects the intellect encounters is that of *arbitrary cognition*. It is not governed by any rule of the understanding, and hence there is no ground for its knowledge. Maimon contends that thoughts belonging to the third kind of thinking are not thoughts at all (V, 24). The outcomes of this kind of thoughts are arbitrary combinations, governed by imagination. Thus, for instance, the fact that “gold is yellow” is classified by Maimon as a synthesis which owes its “truth” to the common appearance of such and such a metal and the color “yellow” in time and space; it is therefore (at least for the finite intellect) just an arbitrary synthesis, hence a product of the imagination (*ibid.*, 78-86), because the understanding has no insight into the reason of this coexistence.

Leibniz's Principle of Inclusion

Regardless of which interpretation of Leibniz one chooses, there is wide agreement concerning the centrality of the principle of inclusion. Leibniz himself describes it as follows (*Discourse on Metaphysics*, section 8; Leibniz (1956b), 307):

It is indeed true that when several predicates are attributed to a single subject and this subject is attributed to no other, it is called an individual substance; but this is not sufficient, and such an explanation is merely nominal. We must therefore consider what it is to be attributed truly to a certain subject.

Now it is evident that *all true predication has some basis in the nature of things* and that *when a proposition is not an identity, that is, when the predicate is not explicitly contained in the subject, it must be contained in it virtually*. That is what the philosophers call *in-esse*, when they say that the predicate is in the subject. *Thus the subject term must always contain the predicate term, so that one who understands perfectly the notion of the subject would also know that the predicate belongs to it.* [Leibniz's italics]

Every true proposition, reflecting the relation between subject and predicate,²⁴ is based on this principle. That is to say, the predicate

possibility of different signs having meaning in its calculus requires the notion of difference; the latter cannot be yielded by formal logic, which knows only identity and contradiction. The idea of difference requires the introduction of transcendental logic (cf. II, 150-151).

²⁴ I shall not discuss here whether Leibniz thinks that other forms of propositions — not composed of a subject and a predicate — are possible.

is included in the subject. This, for Leibniz, is the genuine logical relation between subject and predicate (Leibniz (1956b), 307-308). However, two main questions arise: 1) What does it mean to be included? and 2) What could grant 'truth' to such a proposition? Explaining these problems requires us to dwell on Leibniz's understanding of identity to some extent. There are truths that do not require any justification, in his view. These are the identical propositions,²⁵ and Leibniz holds them to be "primary propositions". Primary propositions (which are, in fact, identical ones), serve as the basis of all necessary true knowledge (Leibniz (1956b), 226). And though it seems that such propositions can be of scant help in producing knowledge, Leibniz claims that a careful examination will show the contrary (*ibid.*):

However much useless 'coccysm' there seems to be in these judgments [=identical propositions], they nevertheless give rise to useful axioms by slight change.

Leibniz's logico-metaphysical project is grounded on these propositions. If we can find a way to show that other propositions are derivable from identical propositions, then we will have achieved a method enabling us to ascribe to the former truth and necessity. What would this method look like? There are basically two ways of securing such truth to propositions. The first is by substituting an equivalent term in our proposition at hand — showing thereby that it is actually an identity (*ibid.*). The second, which is more relevant to this essay, is by analysis of terms. Analysis of terms amounts to showing their grounding in identity. According to Leibniz, analysis in this context means that a dissection of the subject term would show that it includes the concept of the predicate itself. Thus, analysis of the subject C (sometimes attached to the predicate B) would show that it is, in fact, A+B, and therefore the proposition is actually claiming that A(B)(A. There are two kinds of propositions — necessary and contingent — which are candidates for such an analysis.²⁶ A necessary proposition is "one whose contrary implies a contradiction" (Leibniz (1956b), 264). Such

²⁵ "Identical propositions [...] are incapable of proof and thus true per se, for of course nothing can be found to serve as a middle term to connect something with itself" (Leibniz (1956b), 226; cf. Leibniz (1956b), 264).

²⁶ I refrain here from discussing propositions which include existence.

necessary propositions, in turn, are either explicit identities or “derivative truth”, which is reducible to identities (i.e., traced back to identities by analysis).²⁷ The other kind of proposition is one which includes a contingency. A contingent proposition cannot be reduced to an identity in a finite number of steps, “though the predicate inheres in the subject” (Leibniz (1956b), 265). For the finite intellect it seems to be without justification,²⁸ in contrast to the identical propositions. For an infinite intellect, however, the situation is different, “being able to see, not the end of the analysis indeed, since there is no end, but the nexus of terms or *the inclusion of the predicate in the subject* since an infinite intellect sees everything which is in the series” (ibid.). The difference between contingent and necessary truth, insofar as the truth’s necessity is at stake, is only due to the inability of the finite human mind to comprehend the infinite. For the infinite intellect, by contrast, both kinds are reduced to identity.²⁹

To sum up:

1. According to Leibniz, propositions are to be analyzed in accordance with the principle of inclusion.
2. The principle of inclusion, in turn, is to be ground in identities.
3. The method of securing the validity of our knowledge is by analyzing concepts into their elements, and then by tracing the latter back to the primary propositions.
4. Ideally, all our knowledge should be derived in this way.

Knowledge as portrayed by Leibniz is basically immutable and static. The finite intellect is doomed to achieve such knowledge in a kind of a process, whereas the infinite intellect perceives things in a way that takes knowledge to be eternal. It is not only that this knowledge does not suffer change; it is complete in a way that precludes development of any kind, since, ideally, everything is already included in the propositions of identity. I hope to establish

²⁷ According to Leibniz, this kind includes the metaphysical and the geometrical truth (Leibniz (1956b), 264).

²⁸ We know contingent truths either by appealing to experience, or by assuming the principle of sufficient reason (Leibniz (1956b), 265).

²⁹ Russell (1992), 61, suggests the same. In his view, relational propositions are reduced by Leibniz to the subject-predicate form, and, in turn, to identity (ibid., 13).

below that Maimon's view of knowledge offers an alternative, which I shall call 'developmental logic'.

Kant's Synthetic a priori Judgment

The synthetic *a priori* notion, which was introduced by Kant, is problematic for Maimon, but not from a traditional point of view. As a result, he provided a new definition of the Kantian pair of analytic and synthetic. However, it is important to note that it would be presumptuous to suppose that one could exhaust Kant's concept of synthesis and explore it entirely in the way Maimon proposes. I am thus limiting myself to some points that are crucial to the general thesis of this essay. According to Kant, an analytic judgment possesses several characteristics,³⁰ one being a version of the inclusion principle; indeed, the criterion for distinguishing analytic from synthetic judgments is the "contradiction". If one gets a contradiction by negating the predicate, then the judgment is analytic. As for a synthetic judgment, Kant describes it as a judgment which does not satisfy the inclusion principle, i.e., when the predicate is not included in the subject, or when the negation of the predicate does not yield a contradiction. Unlike Leibniz, Kant holds that it is impossible to expand our knowledge by analytic judgments; only synthetic judgments can serve this goal.

Where should we look for the ground of such a judgment? Both metaphysical and transcendental deductions are supposed to secure the validity of knowledge gained in experience, taking the concept of synthesis as its subject of exploration.

Though Maimon criticizes Kant on diverse grounds,³¹ I will refer to only one of his criticisms; it is not stated explicitly, but it underlies his notion of synthesis. Maimon claims that there is a gap in Kant's definition of analytic and synthetic: whereas the analytic judgment is characterized in the logical realm, the synthetic judgment lacks any logical characterization of its own. We only know that it is *not* analytic judgment. To put it differently, Kant provides two aspects for the analytic judgment, that is to say,

³⁰ *CpR*, B 10-11.

³¹ Most especially for Kant's not providing a satisfying account of how the pure concepts of understanding — the categories — can be applied to the world of experience.

he first gives us the logical characterization of the relation between subject and predicate, and second, the source of validity, i.e., logical validity. In the synthetic judgment, by contrast, he fails to give us its general logical characterization. Thus, we understand what makes analytic judgment what it is, or what kind of logical form it has; but we lack any singular and definite rule which governs a synthesis.³² Kant is right, according to Maimon, in saying that “by synthesis, in the most general sense, I understand the act of putting different representations together, and of grasping what is manifold in them in one act of knowledge” (*CpR*, B 103). Synthesis is indeed an *act* of the understanding. Kant is also right in his demand that “it is to synthesis, therefore, that we must first direct our attention, if we would determine the first origin of our knowledge” (*ibid.*). Kant’s next step is to find the ground for the pure concepts of understanding, and to show their origin, their completeness, and the way in which they can be applied to intuition. He then proceeds to investigate the logical forms of judgments, and attaches these to the categories. However, he explains neither the *rule* governing syntheses nor what synthesis in itself is. Maimon’s LOD is meant to fill this lacuna, and, indeed, he endeavors to show how the categories should be deduced in accordance with this law. Only those forms in accordance with it are actually categories, whereas the others are excluded.³³ Thus, the missing link in Kant’s philosophy is an exhaustive account of *what a synthesis is*.

³² See, for instance, Kant, *CpR*, B 103-104, where he declares that “synthesis in general [...] is the mere result of the power of imagination, a blind but indispensable function of the soul, without which we should have no knowledge whatsoever” (*ibid.*, B 103). The important point here is that for Kant it is possible to assume that these syntheses are given to the understanding *qua syntheses*, before the intervention of the understanding. And thus, “to bring this synthesis [that which is the product of the imagination] to concepts is a function of the understanding, and it is through this function of the understanding that we first obtain knowledge properly so called” (*ibid.*). Kant qualifies this claim, and suggests that the synthesis of reproduction in the imagination is governed by *a priori* principles. Later on he claims that combination (*conjunctio*) cannot be grounded on the senses; “it is an act of the spontaneity of the power of representation”, yet it “is an action of the understanding, which we would designate with the general title synthesis”. For Maimon these would be arbitrary combinations.

³³ Maimon claims explicitly that only the LOD can be the ground for a deduction (V, 212-213). Thus he excludes “causality” from the table of categories, since it fails to comply with the LOD.

On the basis of this reconstruction, we can begin to appreciate Maimon's new definition of synthesis, and thereby go a step further. Maimon says that what Kant calls synthetic, he would call analytic, and what Kant calls analytic is not a thought for him at all (V, 87).

What Is Analytic according to Maimon?

Analytic and identity:

An analytic judgment based on identity (Leibniz and Kant) is not a thought at all in Maimon's view (*ibid.*). The reason for this will become clearer later. At this point, however, we can clarify his position as follows: Thinking, for Maimon, is not just some calculus of representation occurring in the mind; it should rather yield something new. The intellect in its highest form is creative, and Maimon describes its activity as presentation (*Darstellung*). Thus, "the understanding (*Verstand*) is not subjecting something given *a-posteriori* to its *a-priori* rules. The understanding *generates* (*läßt entstehen*) it *according* to its own rules" (II, 82). In an analytic judgment (by identity) we only repeat that which is already there. To put it differently, the law of contradiction (and identity) governs formal logic. Nothing can violate it, but it produces nothing new, whereas an act of thinking produces a new thought.³⁴ What kind of a thought is $A=A$? According to Maimon, the only thing it can claim is that the law of contradiction has not been violated. So, if I say "God is God", this is actually a misleading structure of judgment, since nothing was added to the concept of God. It has no consequences; it claims to be saying something, but, in fact, only asserts that the law of contradiction has not been violated.

Maimon's New Definition of Analytic:

Maimon's new definition of analytic judgments suggests that an analytic judgment does extend our knowledge and does not rest on identity. Thus, for instance, it is not included in the *concept* of a triangle that it has three angles. This proposition is true due to its construction in pure intuition. According to Maimon, that a triangle has three angles could be derived from the *subject* of the

³⁴ Cf. I, 247.

judgment rather than from its *concept*. The concept of a triangle does not imply that it has three angles. The subject (the triangle), has consequences that can be formulated in a judgment, “a triangle has three angles”. We gain new knowledge regarding the triangle (which might, indeed, be necessary), but it is provided, Maimon claims (*ibid.*), from the construction of a triangle in intuition. Thus, the triangle is constructed with the aid of a rule, but this constructed triangle allows us to draw a conclusion not included in its definition. To sum up, an analytic judgment is one which extends our knowledge regarding the *subject* itself and not the *concept* of the subject. Thus, some of the judgments that Kant considered to be synthetic judgments that extend our knowledge, are considered by Maimon to be analytic ones (V, 86).

Maimon’s New Definition of Synthetic:

Two elements might be helpful in explaining Maimon’s use of synthesis:

1. The negative characterization: In a synthetic judgment, the predicate does not follow from a subject. Thus, for instance, in the synthesis ‘right-angled triangle’, the ‘right-angled’ does not follow from the subject or from the subject’s concept (triangle). If one says, “a triangle can be a right-angled triangle”, the claim would not follow in any way from the *concept* of a triangle. Another way that Maimon puts it is in relation to the question of *construction*.³⁵ A right-angled triangle does not follow from the construction of a triangle. In order to create a right-angled triangle, one has to have in one’s possession a new rule of construction that pertains to it (the right-angled triangle) exclusively (V, 87).

2. The positive element: The combination of the two elements creates something new, not given before. Thus, a synthetic judgment has new consequences which cannot be derived from the subject alone. Saying, for instance, that a triangle can be a right-angled triangle amounts to claiming that the latter has new consequences. How can this new determination be achieved? First, Maimon thinks that this kind of synthesis obeys the L.O.D. The subject is independent of the predicate in several ways. It can be

³⁵ Later I will discuss the status and role of construction in Maimon’s philosophy.

thought without the predicate, whereas the predicate cannot be thought without the subject. Secondly, the determination in general has new consequences which cannot be derived from the subject alone. And, lastly, constructing the subject is not enough for the formation of the new determination. The latter needs a new construction.³⁶

Thus, both analytic and synthetic judgments are in accord with the LOD, and both widen our knowledge. The former, however, does not yield a genuine new concept; it rather explicates the fact that the synthesis of a triangle has its own consequences. A synthetic judgment, by contrast, yields a *new concept*, dependent on its subject in the sense that its predicate cannot be grasped by itself. A new concept is produced — in compliance with the LOD.

To sum up what has been achieved so far, I would say:

Concerning Leibniz: Leibniz takes the principle of inclusion to be the foundation of knowledge. God or the infinite intellect thinks in identities. With the aid of identities, the human intellect, the finite one, can think to some extent like God. The “ideal” of knowledge in Leibniz’s portrayal is static, by which I mean that there is nothing at the end not included in the beginning. Imagining some “progress” in knowledge is due solely to the finite structure of the human mind. This picture of knowledge is rejected by Maimon’s LOD on several counts. First, as we have seen, the predicate, according to Maimon, is not contained in the subject (the subject can be grasped without the predicate). Furthermore, identities are not thoughts for Maimon; they are requirements posed by the law of contradiction, and their realm is restricted to formal logic alone. Formal logic itself is dependent, as we have claimed, on transcendental logic. The basic vehicle of Leibniz’s philosophy (i.e., identities) is rejected by Maimon insofar as “thinking which determines real objects” is concerned.

Concerning Kant. Maimon’s attitude to Kant’s basic notion of synthesis is different. He does not dismiss the idea that it is “to synthesis [that] we must first direct our attention if we would like to determine the first origin of our knowledge”. On the contrary,

³⁶ As stated in the previous note, a more detailed exploration of construction will follow later in this essay.

synthesis is the vehicle of Maimon's philosophy as well. But he thinks that Kant failed to explore this concept to its full extent and draw conclusions from it. By positing the LOD, he tries to fill in the gap left by Kant.

In the final section of my essay, I will try to elaborate on the close connection between the LOD (or the new notion of synthesis) and Maimon's new conception of logic and knowledge. We will see that the LOD provides the ground for a new understanding of the latter. I next aim to elucidate this issue further, and suggest that in order to understand Maimon's skepticism and his idea of speculative logic, we must relate it to the concept of synthesis as delineated with the aid of the LOD.

*The Program of Speculative Philosophy and Skepticism*³⁷

The Asymmetrical Principles

In the first two sections, we dwelt on the unique asymmetrical relation between the predicate and the subject, which yielded the following results:

1. Every predicate can have only one subject.
2. In any synthesis, only one predicate can refer to the subject.
3. The reduction thesis (i.e., the judgment) can be reduced to the concept, and the implications to the notion of 'truth'.

The first two results I name the 'principles of asymmetry'.

In addition to these principles, Maimon, in his *Logik*, adds a principle of transitivity, which is twofold. *First*, every determinant of a whole determination is also a predicate of its subject (V, 88). This is the outcome of the definition of the predicate (deter-

³⁷ Cf. Freudenthal (2002a), 15-21; 35-40), who develops the thesis underlying this chapter, namely that of Maimon's unique combination of skepticism and critical philosophy. According to Freudenthal, the source of Maimon's skepticism is his rational dogmatism; rationalism sets requirements that the finite mind can never fulfill, which results in skepticism. My aim in this chapter is to show the role of the LOD in this interpretive framework, or, to put it differently, to show that the LOD comprises both the requirements that cannot be fulfilled by a finite mind and the resulting skepticism. Nevertheless, it is the LOD that delineates the view of what knowledge is and what structured it.

minant) and the subject. Since a predicate is that which cannot be thought without the subject, and since the first predicate cannot be thought unless the subject is thought, then the second predicate is also a predicate of the first subject. Thus, if we have a determination (for instance, a right-angled triangle), then this determination is also a determinant (predicate) of the subject term in the synthesis 'triangle' itself. If the triangle is then a determination consisting of the subject 'closed figure' and a predicate 'three sides', then the right-angled triangle is a determinant (predicate) of the subject 'figure'. *Second*, a predicate of a predicate is a predicate of the whole determination and is therefore also a predicate of the subject (ibid., 89). Maimon considered this twofold principle to be of crucial importance (ibid., 90). The reason for this, I think, should be understood against the background of its outcomes. Whereas the principles of asymmetry stress the dependence of the predicate on the subject, the final principle gives the whole system its structure. Every new synthesis is dependent on the previous subject, and becomes, in turn, the subject in the following synthesis. Thus, the outcome of considering all of these principles together is a new picture of logic and 'ideal' knowledge. A complete transcendental logic (whether such is possible shall be considered later) provides us with an ultimate description of any possible knowledge; it exhausts the whole conceptual realm. Every concept has a definite place in relation to another concept, and thus the conceptual realm is hierarchical. But this claim (i.e., that conceptual knowledge is hierarchical) is just the first half of the picture. The second is the claim that every real combination of subject and predicate is a new synthesis, which is not inferable from the former subject.³⁸

If we think then of an ideal picture of knowledge established by the LOD, we first have this complete hierarchy. Next, we have to think of the LOD's other implication, which is the form of a synthesis. We have seen that Maimon rejects the idea that in thinking that determines objects, Leibnizian "identity" can be of help. An

³⁸ Bransen (1991), 112, puts it similarly: "All this suggests that Maimon is thinking of linear chains of representations, of which every link is governed by the 'principle of determinability', such that the thought of the chain as a whole would amount to a complete concept of real objects. This is indeed, a crucial aspect of Maimon's philosophy".

analytical judgment (*à la Leibniz* is not an act of thinking, according to Maimon, but a formal condition which should not be violated. Furthermore, Kant's concept of synthesis is not complete, unless we relate it to the LOD.³⁹ Maimon, as we have suggested, thinks that a thought not governed by the LOD is a product of arbitrary thinking.⁴⁰ The LOD sets the conditions for such a synthesis, whereby there must be some inherent relation between the specific subject and the predicate. Nothing, in fact, can come from the 'outside'. And thus for Maimon the possibility of thinking real objects is dependent on finding a kind of thinking which would neither fall into 'identities', nor take the idea of synthesis as a kind of arbitrary combination of two independent concepts. The concept of the predicate must 'somehow' be related in a positive way to that of the subject. This 'somehow' is the main issue of our following discussion.

Maimon takes the understanding and the intellect to be the source of this inherent relation between a predicate and a subject. If we can show that the predicate is originated *by* the intellect *from* a subject, then we can demonstrate the manner in which thinking can accomplish what the LOD sets forth as a condition for each real thought. Two claims, not unrelated to each other, are posed here. The first is that the intellect is not just a faculty of representation, but one which comprises synthesis by engendering the predicate from within itself. The second is that this kind of activity is dependent on the asymmetrical relation between the subject and the predicate. If the first claim is not accepted, we cannot avoid an arbitrary thought, unless we accept Leibniz's "identities". Both possibilities were rejected by Maimon. If we exclude the second claim, we shall get only an arbitrary thought — a combination of two concepts which does not comply with the LOD. We have already quoted Maimon's characterization of the understanding as a creative faculty. He says: "the understanding (*Verstand*) is not subjecting something given *a-posteriori* to its *a-priori* rules. The

³⁹ Bergman (1967), 98, says: "Kant revealed the synthetic unity and made it the highest principle of his system, but he did not define the reason for this synthetic a-priori unity. This deficiency was supplied by Maimon's principle of determinability".

⁴⁰ II, 93; cf. *ibid.*, 391, for the status of arbitrary thinking and thinking in space and time.

understanding *generates* (*läßt entstehen*) it according to its own rules" (I, 82). Maimon claims that in order to understand the possibility of an *a priori judgment*, we have to show the genetic development of the *concept*. To explain what a color is, for instance, it is necessary to explain the way in which the concept has been generated. But this is impossible, according to Maimon, if we deal with concepts which derive from experience (*ibid.*, 57). Before embarking on the question of how is it possible to show the manner in which concepts are generated, I would like to comment briefly on the idea of the action of generating concepts.

Maimon differentiates between representation (*Vorstellung*) and presentation (*Darstellung*). In short, this distinction reflects the difference between an intellect that only *represents* objects which exist in themselves and one that *creates* its own objects *by thinking* them.⁴¹ Thought, according to Maimon, should not be equated with the idea of representing reality;⁴² it is rather that thought and reality are one and the same thing from the perspective of the infinite intellect.

What is the ground for this generation? How could it be in accord with the LOD? To put it differently, we have seen the two aspects of an infinite intellect, which produces and generates its own concepts, and we have noted that the LOD is the condition with which such creation should comply. But the LOD is not a rule of generation. On the contrary, it precludes the notion that a predicate can be deduced from a subject by logical deduction. Hence, any kind of logical inference is excluded from the realm of synthetic creativity; it cannot be the vehicle of such thinking or of thinking which determines objects. If we cannot find a model exhibiting such a creative synthesis, then the whole idea of synthesis becomes just wishful thinking, a kind of hope that somehow the infinite intellect can succeed in a way which is beyond our ken.

It seems to me that for Maimon the mathematical model (and in particular the procedure of construction in mathematics) of thinking satisfies all the above-discussed requirements imposed on such a creative-synthesis.

⁴¹ This distinction is not unrelated to Maimon's idea that the thing-in-itself is not independent of the understanding. Cf. Bergman (1967), 12ff.

⁴² Cf. IV, 42.

It is important to note here that Maimon is ambivalent regarding the structure of construction in mathematics and hence also its role. Nevertheless, I think he considers this the sole possibility affording a solution to the problem of the creative-synthesis. But I will claim later that even if we take the idea of construction in the way described below, skepticism is inescapable. Moreover, the combination of the LOD and 'construction' confers a new form on Maimon's skepticism. Let us first try to see what he means by construction. How could it save the creative synthesis? And what are its implication for Maimon's concept of knowledge and 'reality'?

Mathematics and Construction

Mathematics, especially geometry, is a model which accords with the LOD (I, 125). It obeys the latter's conditions, for example, whereby a right-angled triangle is not included in the concept 'triangle', nor can one think the concept 'right-angled triangle' without the subject 'triangle'. Furthermore, the conclusions attributed to the determinable can be extended to the whole determination. Thus, the consequences of the synthesis 'triangle' are attributable to the new determination 'right-angled triangle'. As such, a theorem which states that a right-angled triangle has 180 degrees is not to be inferred from this determination, but rather from its subject, i.e., 'triangle'. The predicate 'right-angled' cannot be thought without the subject 'triangle'. And so forth. We see here, at least fragmentarily, the hierarchical order of concepts and their asymmetrical relations. So far it seems that mathematics is a model which obeys the LOD.

Given that, Maimon would like to claim that mathematics also possesses another merit. In it we can see both that and *how* the idea of generation is accomplished. In mathematics, we can take one concept and construct another. It worth quoting Maimon's own words here:

God, as infinite power of *Vorstellung* (representation), from all eternity, thinks himself as all possible essences, that is, he thinks himself as restricted in every possible way. He does not think as we do [namely], discursively; rather, his thoughts are at one and the same time *Darstellung* (presentation/complete exhibition). If someone objects that we have no concept of such style of thinking, my answer is: We do in fact have a concept of it, since we partly have

this style in our possession. All mathematical concepts are thought by us and at the same time exhibited as real objects *through construction a priori*. Thus, we are in this respect similar to God.

(IV, 42; translated in Lachterman (1992), 498-499)

The logic of creative-synthesis is suggested in this paragraph. After delineating the infinite intellect's mode of thinking — as presentation and not in representations — Maimon claims that this is partly attainable by the finite intellect. But before we consider the difference between the finite and infinite intellects, we should understand what mathematics offers. First of all, in constructing an object, the intellect shows itself to be creative and not just a faculty of representation. It both creates the concept and exhibits it *a priori*. Maimon calls this act "*creatio ex nihilo*" (III, 58).

We should qualify our understanding of geometry and construction in accordance with the stipulation Maimon poses.⁴³ He does indeed think that mathematical reasoning is dependent upon intuition.⁴⁴ However, he does not attribute intuition (in the sense ascribed to the finite intellect) to the infinite intellect. To explain this apparent dilemma, we cannot think of mathematics as perfect knowledge; it is subjective knowledge because of its dependence on pure intuition. Nevertheless, that the finite mind can present and actually produce a new concept demonstrates the possibility of conceptual production. Even if during the process of construction we are in need of intuition, there still exists the possibility that the main work of production is performed by rules. To put it differently, the intuition is the same before and after the production of the new synthesis; it doesn't contribute to the process of production. Mathematics and geometry are based at least in part on intuition, and hence cannot be considered an objective, but just a pure subjective activity.⁴⁵ Maimon also restricts the demand that

⁴³ The whole discussion here of construction in mathematics is limited to geometry. The status of algebra for Maimon is beyond the scope of this essay. His examples for the LOD are usually derived from geometry.

⁴⁴ Cf. V, 183; VI, 175-176; II, 105-106.

⁴⁵ On this issue, too, Maimon is ambivalent. Sometimes he suggests that mathematics is analytic. He claims that our concept of mathematics is synthetic, whereas it might be that such knowledge is gained analytically. In that case, he says, the objectivity of mathematical knowledge is secured, but we lose thereby the idea of synthetic judgments (II, 60-63). Thus, the idea that mathematics is analytic would require us to abandon our concept of a synthetic *a priori* judgment. It is important to note Maimon's claim that if we understand mathematics

intuition play no part, and is satisfied with the *rule* of construction; there is no need, hence, in an actual construction which may rest on intuition (II, 59-60).⁴⁶

This interpretation of construction does not exhaust the other aspects Maimon sees in its concept. Indeed, construction is based on pure intuition (at least in geometry and as long as we are dealing with synthetic judgments), but it offers us another insight. Maimon claims that in order to present (*darstellen*) a circle, the understanding should give itself a rule. For instance, the rule of *presenting* a circle given by the understanding is something like: Draw an endless number of equal lines from the same point. But Maimon claims that this is not enough, since we have to insure that all the lines are equal. In order to meet this requirement, the understanding poses another rule whereby one can move the line while keeping one of its *ends* in the same place (*ibid.*, 105-106). Indeed, both these rules are dependent on intuition, but the difference between constructing a straight line and constructing a circle resides in the status Maimon attaches to the 'rule'. The rule or (as Maimon designates it) "the ground of an object" (*ibid.*) is something the understanding poses. In the first case we see in pure intuition that the outcome of our rule of construction is something that the understanding is obliged to accept because of its emergence in pure intuition, though it cannot *justify* it. This is not the case, however, in the case of the circle. Here, Maimon claims, the understanding poses the rule by which the presentation is accomplished. Although it could not be accomplished were we not endowed with pure intuition, it is not the work of pure intuition that produces the circle.⁴⁷ It is rather the work of the understanding. Nothing in pure intuition could have provided us with this rule. Inventing a rule is the activity of the intellect *par excellence*. Indeed, in this context, Maimon calls this kind of rule

to be based on analytic judgments, then the *whole* notion of synthetic *a priori* is sacrificed. This fits our interpretation here in that only by finding a model that satisfies the requirements imposed by the LOD can we grasp the possibility of creative synthesis.

⁴⁶ Cf. II, 39-40 for Maimon's discussion of the construction of a circle.

⁴⁷ This example of the circle which Maimon uses in order to show the status of the rule of construction as the ground of an object, is incompatible with his criticism of this very rule, which, he claims, cannot satisfy the definition of the circle.

the manner in which it is generated (läßt *entstehen*), and thus he equates the rule of constructing with both the idea of presenting and the manner in which the understanding creates and generates its concepts (II, 392).⁴⁸

If we take this conceptualization of construction seriously, then I think we have discovered how to explain what a creative-synthesis, or a synthesis *per se*, is. The LOD does not provide us with a procedure for generating concepts, but rather with the conditions such a synthesis has to fulfill. But mathematics, with the aid of 'construction', provides us with the model for an intellect that not only obeys the conditions of the LOD, but also with the sense of how this intellect can create new concepts. One cannot deduce the concept of 'right-angled triangle' from the concept of 'triangle', but one can construct this new concept on the basis of the former concept.⁴⁹

This demonstration, I believe, affords us a new model of knowledge which neither Leibniz nor Kant could offer. It is a logic of generating concepts without relying on deductions and identities. Synthesis for Maimon is a productive activity of the intellect which culminates in creating new objects. It gives us the basis for thinking of developmental logic, that is to say, a process of production which grants the mind the possibility of presentation instead of representation, while considering it a synthetic, not an analytic, activity. Thus Maimon posited the ground — in his concept of synthesis in accordance with the LOD — for the speculative philosophy and logic of German Idealism.⁵⁰ But first we have to show how this conceptualization blazed Maimon's way to skepticism, or at least provided him with another ground for his skeptical position.

⁴⁸ Cf. VI, 175-176; V, 183.

⁴⁹ A problem presents itself here, but it cannot be discussed within the scope of this essay. Assuming our interpretation is correct, it follows that any construction of a new concept is based on the concept of the subject. For instance, in order to construct an equilateral triangle we should formulate a rule which takes its point of departure from the concept 'triangle'. However, we know that this is not the rule of construction for an equilateral triangle. There are several possible solutions to this problem, but I do not see how any of them can be generalized so as to resolve this problem in a comprehensive way, and therefore I set them aside.

⁵⁰ As I shall try to show briefly by comparing the principles and the philosophical picture delineated here with some of the elements of Hegel's philosophy.

Maimon's Skepticism

Maimon's skepticism has different sources and different directions.⁵¹ It is certainly not my intention to claim that it had only one source, but rather that the concept which has been delineated up to now, and which provides the framework for any speculative philosophy, i.e., the concept of the creative-synthesis, led Maimon to adopt a skeptical stance. The very fact that he depicted knowledge in this fashion paved his way towards skepticism.

The source of this kind of skepticism is insinuated, whether we think of the finite or the infinite intellect. As we have seen, Maimon excludes the idea of logical deduction, if knowledge is to be grounded in synthetic activity. Nor is the LOD a candidate for generating the conceptual chain. Instead, Maimon thinks of the intellect's capacity to give rules as the source of this activity of generating concepts by construction. However, there is no rule for creating rules, or, to put it differently, there is no algorithm that can produce rules of constructions. Its lack leaves open the question as to whether rules of construction are findable or not. The finite mind is dependent on chance. As Maimon says in the case of the circle, "it was the luck of this concept that Euclid found the method of presenting it in a-priori intuition" (II, 51). Nothing can guarantee such luck for the finite mind. The infinite intellect, however, can think to infinity and thus perhaps find all the possible rules.

Yet even the infinite intellect is not spared a different problem. If we accept both the hierarchical structure of knowledge and the procedure of construction, we have to assume that each concept builds upon another. But we can never come to the chain's original concept, since, in order to explain the generating procedure, so Maimon claims, we always have to assume something else that was generated in a previous stage; and this goes against the axiom "*ex nihilo nihil fit*" (ibid., 392). Thus we come to the problem which has troubled German Idealism in general — that of the beginning.

⁵¹ There are basically two ways to interpret Maimon's skepticism. The first stresses the problematic involved in applying the LOD to the empirical realm (Cf. V, 153-154; Potok (1968), 104; Atlas (1964), 269ff.). The second sees the source of Maimon's skepticism in his view of the '*quid juris*' and '*quid facti*' (cf. Bergman (1967), 68; Rotenstreich (1968), 542-544; and, in this volume, Beiser, Franks, and Freudenthal).

It is more problematic than it might seem at first glance. One could suggest that there might be a first concept, whence the whole chain could be generated. But according to Maimon, as mentioned above, a subject is what can be thought by itself or what is a *synthesis* in itself (ibid., 378). He thus equates subject and synthesis; every subject is already a synthesis, that is to say, something that has been generated. This idea becomes more comprehensible if we recall the relation between thinking and reality in Maimon's ideal model, whereby thinking is a synthetic activity which produces reality. There is no room for a "given" in such a system, and, since thinking is equated with synthesis, there is no room for a first concept that is not itself comprised synthetically. Thus, even for the infinite intellect, the beginning is a crucial problem, which is not just due to some arbitrary bad luck whereby it failed find such a concept or did not know where to look for it.

Although Maimon never found a solution to this problem, it seems to me that he still gained some interesting insights into the possibility of such a concept — one that would be synthetic, but without, at the same time, requiring another step back in the chain of determinations. This for Maimon is the 'I'. Since this is not the topic of this essay, I will state his position only briefly: In the hierarchy of determinations, there are some "highest syntheses" from which the others are generated.⁵² What is the meaning of this term? Maimon claims that the 'I' is a candidate for that highest synthesis. The way in which he designates this synthesis allows us to overcome the problem we have posed: the I, according to Maimon, "*is itself both the determinable and the determinant*" (II, 194). He claims here that for the finite intellect the 'I' is an idea only, and not something that can be realized, but "it is necessary that the infinite mind would think it in real" (ibid., 195). Thus he outlines a possible solution to the problem we have cited, at least for the infinite intellect. Though this idea repeats itself throughout his philosophical writings,⁵³ he does not develop it further. In fact, he claims, "every theory of the cognitive faculty must begin with the highest class-concept if it is to avoid going around in a

⁵² For a discussion of this issue, see Bergman (1967), 156ff.

⁵³ Cf. Bergman (1967), 165-167.

constant circle[...]. It is well known that consciousness proclaims itself as the highest class-concept common to all functions of the cognitive faculty. We are to understand by this neither the consciousness of the subject nor the consciousness of the object outside of it, but rather the undetermined consciousness or the activity of knowledge in general" (V, 303; translation in Bergman (1967), 166). But it seems that Maimon himself finds this insight difficult, and thus he says, "our language lacks a suitable expression for this highest class-concept; but it does not matter, for the concept exists and manifests itself with unmistakable clarity" (ibid.)

Even if Maimon eventually found an 'I'-based solution, insofar as the infinite intellect is concerned, for the problem of the *ex nihilo*, it cannot guarantee the truth of knowledge produced by the finite mind. The finite mind is inescapably trapped in the middle. This principle is of grave importance: "we begin, thus, to cognize the things from the middle, and we quit again at the middle" (II, 350). The whole theory of truth, as posited by Maimon, is rooted in this principle. When we deal with the finite understanding, nothing can grant it the security of the knowledge possible for the infinite intellect, since it is always trapped in the middle. It is possible for the finite mind to present and generate concepts in the mathematical realm, but there, too, only to a limited extent, and in a fragmentary way we are bound by our intuitions, and the finite mind's limited power of cognition does not allow it to secure and prove the truth of its knowledge. It is philosophically possible to decipher the conditions and the structure of such cognition, and to relate it to the presentation power of the infinite intellect, as Maimon did. But such an activity can never come to completion; it can never establish a full and exhaustive synthetic knowledge, i.e., knowledge which generates its own world. It is doomed, therefore, to abide in the world of the imagination, furnished only with the possibility of looking at the structure of complete knowledge, and of sharing with the infinite mind small fragments of knowledge. These fragments might be extended and widened; nevertheless, they can never be extended to the desirable degree.

To summarize this final section, I would maintain that there are three main claims: *First*, the LOD does not allow synthetic inference. *Second*, this kind of knowledge can be generated by

construction, but construction does not proceed by a defined algorithm. *Third*, there is no first concept to begin the series of synthesis. The main obstacle, as we have seen, is that every concept is itself a synthesis, and thus the first concept would have to be one that is simultaneously a determinable and determinant. All of these claims can be taken as reasons for Maimon's skepticism.

To summarize the general thesis of this essay, the insights which led Maimon to expose the structure and condition of speculative thinking and to elaborate the concept of synthesis such as to allow us to understand the relation of thinking to reality, are the same insights which eventually led him to believe that the finite intellect cannot fully realize thought according to the LOD, a conclusion which resulted in his skepticism.

*Epilogue: Developmental Logic, Speculative Philosophy,
and Maimon's Position*

In the following, I would like to bring Maimon's philosophy into relief by discussing briefly wherein it can be deemed a precursor to Hegel's, and wherein not. My claim is that Hegel's *Aufhebung* is a principle parallel in its function to the LOD; however, while Hegel believed that his principle permits the derivation of new knowledge logically, Maimon doubted whether the requirements of the LOD can be met, i.e. whether the LOD can be used to generate new knowledge, or whether the finite intellect can only use it as a criterion to assess already-known propositions. Whereas the LOD embodies Maimon's rationalism, the doubt as to whether its requirements can be met embodies his "rational dogmatism" — but not his skepticism. It is thus my claim that Maimon formulated the "blueprint" which German Idealism adopted, but without his caveats.

Hegel's *Logik* is here taken as a model of the speculative philosophy of German Idealism. The affinity between Maimon's philosophy and Hegel's was characterized by Bergman (1967) as follows (252-253): "...these two theories have more than similar terminology in common. Both rest on the same basic principle, namely, that thought gives rise to everything from within itself."

Three main features of Maimon's LOD which reappear in Hegel's *Logik* are : the rejection of the principle of inclusion or the

empty identity,⁵⁴ the conceptual hierarchy,⁵⁵ and the new formulation of synthesis.⁵⁶

The first crucial issue is the question of beginning. According to Maimon, we cannot find the primary concept; it is rather that the finite mind always has to begin with some given. As suggested above, this primary concept is accessible only to the infinite intellect, which serves as an “idea” in Maimon. The finite intellect⁵⁷ is a schema of this infinite intellect.

The second issue is construction. As stated above, Maimon argues that there is no procedure which can produce the rule of construction. A new rule is required each time. And, as he insists, it is a matter of luck (II, 51). Only the infinite intellect can think infinitely.

Both these issues — the question of beginning and the law of derivation — were at the focus of many later discussions in speculative philosophy, intensively addressed by Fichte,⁵⁸ Schelling, and

⁵⁴ Hegel stresses on several occasions in his *SL* that identity is empty. Thus, for instance, he says: “If anyone opens his mouth and promises to state what God is, namely God is — God, expectation are cheated. For what was expected was different determination [...] nothing will be more boring and tedious than a conversation which merely reiterates the same thing [...] But, since the same thing is repeated the opposite has happened, nothing has emerged” (Hegel (1998), 415).

⁵⁵ I think this issue is clear to anyone who examines Hegel’s *Logic*. Every concept or category derives from, or is based upon, preceding concepts. Without getting into details, it is clear that *Aufhebung* is the main vehicle leading from one stage to the next. As Hegel puts it: “The Absolute method, on the contrary, does not behave like external reflection but takes the determinate element from its own subject matter, immanent principle and soul” (ibid., 380).

⁵⁶ Hegel esteemed Kant’s synthetic *a priori*, saying: “Kant has introduced this consideration by the extremely important thought that there are synthetic judgments a-priori. This original synthesis of apperception is one of the most profound principles for speculative development; it contains the beginning of a true apprehension of the nature of the Notion and is completely opposed to that empty identity or abstract universality which is not by itself a synthesis.” (Hegel (1998), 589). At the same time, however, he criticizes Kant for sacrificing his achievement by considering it only in relation to intuition, and neglecting the unique power of synthesis (ibid., 589-590).

⁵⁷ It is impossible to dwell on this issue here. However, the infinite intellect and the “sufficient ground” (*zureichender Grund*), considering the special meaning he attaches to it, are both ‘Ideas of Reason’ for Maimon (cf. II, 105, 392).

⁵⁸ As noted above, Maimon considers the ‘I’ as something that could serve as a point of departure, being both a determinable and a determinant. Its resemblance to Fichte’s concept of the ‘I’ is clear, but cannot be developed here. The same applies to Maimon’s notion of synthesis and the idea of activity and creativity of thinking.

Hegel. Consider Hegel's *Logic*, for example, where he takes "being" to be the primary concept from which the whole conceptual realm stems. The LOD is replaced by dialectics, which obeys the conditions of the LOD, but which, in contrast to it, is a law of *derivation*.

One has the impression that the framework and structures of subsequent philosophical systems were extensively based on the principles Maimon delineated for any speculative system, and thus I believe it is worth repeating Fichte's comment in his letter to Reinhold (Fichte (1988), 383-384), which is truly justified if one reads Maimon with a view to the issues discussed in this essay:

My respect for Maimon's talent knows no bounds. I firmly believe that he has completely overturned the entire Kantian philosophy as it has been understood by everyone until now, including you, and I am prepared to prove it. No one noticed what he had done; they looked down on him from their heights. I believe that future centuries will mock us bitterly.

In conclusion, Maimon's *Satz der Bestimmbarkeit* provides the structure for any speculative logic, and paves the way for subsequent philosophical systems. At the same time, it is the most unpretending of philosophies regarding the possibility of the finite human mind to gain any sort of acquaintance with reality. Both these philosophical moments stem from the LOD.

FROM KANT TO LEIBNIZ?
SALOMON MAIMON AND THE QUESTION OF PREDICATION

ELHANAN YAKIRA

Preamble

In commenting upon Maimon's contribution to the modern theory of knowledge, Cassirer ascribes to him an admirable *tour de force*.¹ He believes that Maimon, grasping in all its profundity the problem of the object of experience as posed by Critical Philosophy, managed to think its solution in a way which, in principle, corresponds to Kant's own in the third *Critique*. But, according to Cassirer, Maimon did not share Kant's critical reservations; in fact, he transcended them towards Leibniz' idealist metaphysics. Within the multitude of Leibniz' metaphysical theories, he succeeded in isolating the essential, methodologically most significant moment, which also comprises the culmination of seventeenth-century rationalism: the causal definition.

It is not my aim here to discuss the role of the causal definition in Maimon's rationalism. Cassirer's comment, however, represents a typical trend in Maimon scholarship, in that it echoes Maimon's own description of his philosophy as a *Koalitionssystem*. He has thus purportedly managed to achieve a synthesis of Leibniz and Kant (and Spinoza and Hume). I believe, however, that this view is problematic: it is problematic both as a description of Maimon's achievement and, even more importantly, philosophically, as I hope to explain more clearly below.

There is no doubt that Leibniz was a major influence on and a constant point of reference for Maimon — in his criticism of Kant, *inter alia*. It is also true that Maimon's way of philosophizing is eclectic or (worded differently) that his philosophical program is ecumenical. Nevertheless, he did not really go back to Leibniz. The notion that he transcended Kant towards Leibniz or that he realized a synthesis of the two is an overly simplistic portrayal of his

¹ Cf. Cassirer (1920), ch. I, 5, especially 93-6.

achievement. Kant's "transcendental turn" represents one of those discontinuities which occur at certain crucial points in the history of thought, and which cause old ideas, when introduced into new contexts, to either become philosophically sterile or to acquire new significance. Maimon's fundamental transcendentalism, while critical of Kant in many important respects, blocked his way back to authentic Leibnizianism. It is not that he failed to understand Leibniz. But the vital sense of Leibniz' program and of his basic philosophical motivations was lost.

The general idea on which this study is based — and whereof it is meant to serve as an illustration — is that one can convincingly speak of a 'Leibnizian moment'. I hereby submit the heuristic hypothesis that Leibniz' philosophy is the apogee of a specific period in the history of modern thought. Completely within the radically new Cartesian problematization of fundamental philosophical issues, while at the same time equally radical in its criticism of many of Descartes' theories and general attitudes, Leibniz is in many ways the pivot of fervent intellectual activity involving many thinkers and spread across various countries. Although often appearing in the framework of controversies, in which real differences are intensely debated,² such thinking possesses certain special attributes that confer upon this 'post-Cartesian' period its own physiognomy. The sense of its programmatic, as well as that of many of its thematic aspects, was largely lost already prior to Kant, and completely and irrevocably so after him. As such it constitutes what can be called a 'moment'.³

If asked to do the impossible and delineate this 'Leibnizian moment' in a few words, I would say that it stands out as a

² For Maimon, the association of Leibniz and Spinoza is unproblematical. Although I believe that there is an extremely profound opposition between the two, the latter indeed belongs to the 'Leibnizian moment'.

³ The term 'moment' was used in somewhat similar way by Pocock (1975). As I use it, however, the term does not denote either some general historical conditions or "enduring patterns" in the consciousness of Europeans. What I refer to is specifically philosophical, namely the concrete formulation of ideas in philosophical literature. Without justifying this notion, I would say that it means that the full *philosophical* significance of ideas can be appreciated only within their (philosophical) context, and that in studies like the present one it is more instructive to understand *differences* than similarities. I have tried to give sense to the idea of a 'Leibnizian moment' in a number of recent writings, e.g., Grosholz and Yakira (1998); Yakira (2001), and (2002).

comprehensive philosophical program, whose sense is best encapsulated by Leibniz' *Theodicy* (or by Spinoza's *Ethics*, which is a sort of anti-theodicy). The *Theodicy* is not only a compendium of all the traditional arguments for justifying God, to which Leibniz adds a few original ones, but also probably the last great philosophical work which seriously tries to defend the pertinence of qualifying Being as good. Afterwards, as Kant's practical philosophy expresses forcefully, the 'good' becomes mainly a term qualifying human actions (or motivations). For Descartes it was not a real philosophical issue,⁴ and it afterwards became an acute problem, notably in the work of Bayle and Spinoza. Leibniz' theodicy, however, is not a simple recapitulation of ancient arguments, but a fully modern enterprise — as modern as Bayle's and Spinoza's respective critiques of religion.

Above all, perhaps, Leibnizianism is the aspiration to integrate ethics, political theory and the theory of right, as well as the theory of knowledge and of science, in an overall programmatic unity. Its reference to science is a major constituent of both its modernity and of its distinctiveness. In its methodology and teleology, the science (*Wissenschaft*) that conditions Leibniz' thought — logic, mathematics, dynamics, history, etc. — is thoroughly modern; in its praxis it is less so, because it still combines, in a genuine synthesis, concrete scientific research with philosophical reflection. Since Galileo and Descartes, science has gradually become, thematically and methodologically, relatively autonomous vis-à-vis philosophy and, as such, more an object of philosophical reflection than a field of original philosophical thinking. The 'Leibnizian moment' — Leibniz' own work in particular — is perhaps the last one in which creative scientific research is still an integral part of a comprehensive philosophical program.

The essential element of this program is what Leibniz terms 'the principle of reason'; more than a principle of reasoning or of causal explanation, it is the core of what can be called 'a theory of reason'. Reason, however, was not for Leibniz a faculty of theorizing or of concept construction; nor was it a law of historical progress unfolding in human institutions. It determines not only the mode

⁴ This, of course, is an oversimplification; for a recent and forceful defense of the idea that Descartes was also a moralist, cf. Kambouchner (1995).

of rationality operative in science, but also, and in particular, the *philosophical*, even *theological*, teleology of the scientific enterprise. In other words, it is the foundation of the whole system — of theodicy as well a theory of science; it supplies a justification for the infinitesimal calculus and for dynamics (i.e., of physics as a science of force), as well as for the pertinence of the notions of 'universal jurisprudence' and of the harmony between the realms of nature and of grace. It is precisely this vast programmatic horizon of the philosophical effort and of the work of philosophical reason, and its immediate link to the most technical aspects of the theory of predication, that is lost to Maimon.

But there is more. Leibniz's theory of reason has some substantive and tangible aspects which, I suggest, can be articulated around the notion of intelligibility. Intellectual activity is ultimately aimed not at constructing an objective science, at criticizing it, or even at supplying it with credible foundations, but at metaphysical comprehension and moral justification. The *intelligible* signifies neither an inner 'substantial form' (although Leibniz rehabilitates this old notion to some extent), nor ideal entities outside the world of existence. It signifies rather the thinkable and formally analyzable structure of unity which constitutes existence. For Leibniz, 'real' existence is monadic, which is understood not as presence, but as real due to its being fully determinate and, *as such*, fully intelligible and justifiable. Thus Leibniz' program should not be confused with pre-modern ontologism, with Cartesian rationalism, or with transcendentalism.

The essence of a 'moment' is that it comes and goes. The vast program of pre-established harmony was no longer viable for Maimon. In the following I wish to explore the problematic way in which he allies — or rather fails to ally — transcendental philosophy with Leibnizian rationalism by means of an analysis of his (Maimon's) theory of *predication*. After a few general remarks on the problem of predication, I shall present what I understand to be the main elements of Maimon's theory of predication. I shall base my discussion almost exclusively on his *Essay on the Transcendental Philosophy*, and develop it while stressing the Leibnizian features of his theory — in particular, the role and sense given to the notion of *determination*. Finally, I shall try to explain how — or why — Maimon's theory of predication-as-determination differs

from Leibniz'. My purpose, then, is not to offer elements of a comparative study, but to examine the mini-history of the respective predication theories of Leibniz, Kant, and Maimon from the perspective of the 'Leibnizian moment', which was "forgotten" in the 'transcendental turn'.

Predication

Predication is a theme which, while restricted in scope and sometimes rather technical in nature, involves high philosophical stakes. It constitutes an extremely complicated question with regard to both its thematic and historical aspects.⁵ Most simply, predication is a linguistic structure — often taken as fundamental and universal — in which a primary unity of signification emerges out of disparate elements of discourse. Linguists generally study the different modalities of this structure or the different modes of unifying or structuring articulated by predicative forms. Philosophers and logicians try to understand how the structures of language express either the underlying operations of thought or the structure of things — or both. Their ideas can be presented, analyzed, and interpreted in many ways, some of which are quite remote from their starting-point. So much so that, rather than being a single and definite issue, the term 'predication' has come to designate a whole array of linguistic or grammatical issues, as well as logical, epistemological, and ontological ones.

As with so many topics, it was Aristotle who largely fixed the framework within which the philosophical question of predication was debated for centuries. Among the many distinctions he formulated, such as that between 'essential' and 'accidental' predication, the one that will occupy us here is the distinction between predication as 'saying something of something' and 'being in (*in esse*) something'.⁶ From this a whole tradition arose, whereby Aristotle's

⁵ Despite this, there is surprisingly little literature on predication. One exception is Bogen and McGuire (1985).

⁶ About half of the articles in the work cited in the previous note are about Aristotle (two are about Leibniz). Predication as an *in esse* relation appears already in Plato's theory of 'participation'; cf., for example, Turnbull (1985). It is, however, in Aristotle that the duality — logical and ontological — of predication as a philosophical concept becomes explicit. It is also in him that the essential link between predication and the theory of science (in the classical sense of

two main formulations were construed in diverse ways. The latter, the *inesse* formulation, seems to point to an ontological problem, while the former is understood as a grammatical, logical, or epistemological notion, in which the intentional and synthetic elements of predication come to the fore. It seems reasonable to suggest that what constitutes the specific character of the modern philosophical discussion of predication is that it becomes a matter of thought in an *essential* way. Whether “saying something of something”; qualifying an object or adding an adjective to a subject, subsuming the less general, or singular, under the more general; or simply concatenating disparate elements — predication is the foundation or the condition of possibility of *sense*, and sense belongs to thought and to the ways thought relates to things. This modern attitude becomes apparent with Descartes’ theory of judgment; it becomes explicitly a theory of predication in Arnauld and Nicole’s *Logic*; and again in Kant, where (notably synthetic) predication is understood as an act of judgment, whereby one term is subsumed under another.

There is, however, one idea that appears to be a common denominator (in various degrees of explicitness) of all these different theories of predication, ‘ontological’ and ‘logical’, ancient and modern. It is that the relation expressed by a predicative structure is one understood primordially (i.e., both originally and primarily) by means of the opposition between the particular and the general or the one and the many.⁷ It is precisely his refusal to acknowledge this relation as the universal framework for conceptualizing the question of predication, as well as his rejection of the primordially of *generality* in formulating an answer to it, which constitutes Leibniz’ profound originality in dealing with this issue; and it is precisely this Leibnizian insight which is retained in Maimon’s theory of predication.

a theory of scientific rationality or simply of reason) is most clearly stated — science is *Logos apophantikus*, which is precisely what makes it susceptible to being true or false. See Granger (1976), 32.

⁷ There is a “perennial theory” of predication, says a contemporary philosopher, and “after all, the problem of predication is but one form of the many puzzles which traditionally fall under the heading of the One and the Many” (Sellars (1985), 289).

Leibniz

It is well known that Leibniz' theory of predication is based on the *inesse* principle. In fact, it can be called an unprecedented and never-repeated attempt to systematize this principle. However, despite some interpretative claims to the contrary, Leibniz does not leap over Descartes back to pre-modern modes of thought. His philosophical enterprise as a whole and his theory of predication in particular are fully and irreversibly conditioned by Cartesian philosophy; there would otherwise be no sense in speaking of a 'Leibnizian moment'. Broadly speaking, Leibniz' accomplishment consists in turning the *inesse* principle from a fundamentally ontological one into a principle of a theory of reason: he argues that it is merely the adequate or 'philosophical' form of the *principle of reason*. As such, it is the basic principle of a theory of the rationality of being conceived as expressing the nature of *reason*. For Leibniz — unlike Aristotle, for example — the concept of reason is not derived from the nature and structure of being (*Ousia*); but, unlike Kant, the structure of thought is not imposed on things. Reason is a faculty of theorizing and of building an effective science of the world and a philosophical understanding of being. And, simultaneously, it is the structure of the intelligible attained in reflexive self-knowledge. 'Intelligibility' for Leibniz is first and foremost a matter of *determinateness*. In the following, we shall consider what Maimon retained of all this and what he lost.

Kant

Generally speaking, Kant's conception of the nature of predication belongs to the 'perennial tradition', from which both Leibniz and Maimon dissent. In *Die falsche Spitzfindigkeit der vier syllogistischen Figuren erwiesen* of 1762, Kant says that "to judge, is to compare to a thing something which is taken as a character. The thing itself is the subject, the character is the predicate"⁸. Later on, as the idea of transcendental logic takes shape, it becomes clear that the predicative act of 'comparison' comprising judgment presupposes more elementary forms of synthesis, all of which depend on the

⁸ Kant, AA, II, 45-61, 47.

fundamental synthetic unity of apperception.⁹ But even here, insofar as the question of predication is concerned, Kant remains within the traditional framework. It is mainly the images of a unifying act, of ‘saying something of something’ and of subsumption (i.e., of recognizing something as knowable under a universal), which condition his discussion. It is, in fact, *synthesis* that characterizes, that actually defines, the specific kind of activity we call ‘thinking’, the spontaneous activity of the understanding.¹⁰ But Kant understands ‘synthesis’ in a more or less literal sense: it is the creation of unity where it is originally lacking.

In his *Note to the Amphiboly of Concepts of Reflexion*, Kant formulates an extensive and explicit criticism of Leibniz. It is a remarkable mixture of sound observation and deep misunderstanding. But we can use his discussion in the *Amphiboly* to elucidate Kant’s thinking about predication, since this, in fact, molds much of his argument here. He bases his criticism of Leibniz’ alleged intellectualism on the idea of *concepts of reflection*. Through them we confront the question of where, in which faculty, our representations are *connected, combined, or compared* (CpR, A 261/B 316). What Kant takes to be the “priority of form” (which he opposes to the dogmatic priority assigned by Leibniz to the ‘matter’, or content, of thought) is the precedence of relations of comparison to judgment. The relations in which representations can stand to one another (*identity and difference, agreement and opposition, inner and outer, determinable and determination* [matter and form], CpR, A 261/B

⁹ This is what J. Proust says, in principle, in Proust (1986), 53-9. However, she does not seem to be aware of the great distance separating Kant’s alleged Leibnizianism, even in the pre-critical period, from the real Leibniz. She bases her analysis on the notion of *character*, which designates elements of the ‘comprehension’ of a concept, that is, roughly, its inner content constituents. It emerges in this sense as a central notion of logical theory with Arnauld and Nicole’s distinction between the concept’s extension and its comprehension. Although Leibniz’ basic attitude could be described as ‘intensionalist’, he seldom uses the terminology of ‘characters’. When he does, it has a different sense than in Kant and Arnauld. Maimon, a much keener reader of Leibniz than Kant was, understood this.

¹⁰ “The spontaneity of our thought requires that it [i.e., the given manifold] be gone through in a certain way, taken up, and connected. This act I name *synthesis*. By *synthesis*, in its most general sense, I understand the act of putting different representations together, and of grasping them in one knowledge” (CpR, A 77/B 102; Kemp-Smith adds “act” before “knowledge”, but this is misleading.)

318) are modes of comparison performed “prior to the construction of judgment” (*CpR*, A 262/B 318). They are also “prior to the *concept* of things” (*CpR*, A 269/B 325; my italics). Perhaps we can say that they are pre-linguistic acts of ‘comparing’ or relating which condition an ensuing articulation of a judgment. They are, so to speak, judging in action; while ‘judgment’ is the pronounceable structure which results from the action of judging.

Kant uses here, too, the idea of ‘determination’: *Matter* and *form*, which are none other than *the determinable* and *determination*, are the fundamental modes of reflection; they underlie all the rest (*CpR*, A 266/B 322). That matter/form is the same as determinable/determination seems unproblematic to Kant. Thus the structure of predication and the kind of work we call determination are one and the same thing (*CpR*, A 267/B 323):

In any judgment we can call the given concepts logical matter (i.e. matter for the judgment), and their relation (by means of the copula) the form of judgment. In every being the constituent elements of it (*essentialia*) are the matter, the mode in which they are combined in one thing the essential form. [...] The understanding, in order that it may be in a position to determine anything in definite fashion, demands that something be first given, at least in concept.

Kant’s conception of the nature of predication involves a radicalization of the traditional “saying something of something”. There is one ‘something’ that involves positive content — the concept or the predicate; and another ‘something’ that is, in a manner of speaking, empty. The symmetry of relation implicitly assumed by the traditional notion of ‘comparison’ vanishes. Predication becomes, with Kant, something which can be described as essentially a work of *qualification*.¹¹ Work is performed in it, and it is performed wholly by the predicate; the work it accomplishes is that of qualifying an object that was originally, insofar as it is a pure *given*, without qualities, without anything which can be *thought*, i.e., represented by the understanding as a concept. Prior to the work of predication or outside the predicative whole, an object=x (so

¹¹ Kant often uses the term *application*. It expresses the radical sensibility/understanding duality and mutual exteriority. However, the term *qualification* seems to me to express more adequately the nature of work performed in an act of predication according to Kant.

called by Kant in the first edition of the *Critique*) is something whereof we can, strictly speaking, think nothing.¹²

The object= x is the substrate — or perhaps the target — of the work of predication. In it something is said about the object. Or, rather, something is *thought* of it. Or, trying to be still more precise, predication means that an object= x is *thought in* this act of predication. Taken literally, Kant's metaphor of the object= x means precisely that: namely, that the act of predication is the act of thinking itself, in the sense that thinking is essentially qualifying, and knowing is essentially the result of this act in which the unknown becomes known, not because we discover something *about* it, and not because we think *of* it, but because we think *it* and thus make of it an *object of thought*.

This is the core of the *Copernican Revolution* as seen from the perspective of the theory of predication. What Kant accomplishes in identifying 'form' and 'determination' is that predication becomes fully and explicitly an *act*. Not less than a theory about the scope and nature (or status) of knowledge, or an answer to the question of how synthetic *a priori* judgments are possible, it is an answer to the question of 'what is to think'. The novelty of Kant's position can be expressed by stating that thought is not *about* an object, but *of* it. The object — the real one and not the ' x ' — is, as Kant says, *constituted* in and by this activity of thinking.

Maimon's Theory of Predication

The fourth chapter of the *Essay on the Transcendental Philosophy* is entitled "Subject and Predicate, the Determinable and the Determination". The notion of 'determination' is Leibnizian; the seemingly unproblematic passage thence to the notion of 'the determinable' is not. Be that as it may, the basic idea that Maimon develops here is that an adequate philosophical interpretation of what we call 'predication' can be obtained by analyzing it as an act

¹² There is a notorious ambiguity in the issues involved here which explains, among other things, the elimination of the 'object= x ' in the second edition. Does the 'thing-in-itself' play any positive theoretical role, as it would in Maimon? What is the relation between the object-subject in judgment and the object= x ? Does saying that we cannot *think* of something mean also that we cannot *say* anything of it? For the pure *given* is a representation, a sensual intuition, as well. We cannot tackle these difficulties here.

of 'determination'. This is not a trivial idea at all, and it is, I believe, uncommon in the history of predication theories. It is, in fact, a Leibnizian idea, and it is precisely the Leibnizian perspective of Maimon's discussion of predication that can, in my view, aid us in clarifying many of its obscurities and unravelling many of its intricacies.

Maimon's theory of predication is heavily indebted to Leibniz', and much of chapter four is very Leibnizian in style. Indeed, there are quite a few phrases that seem to have been borrowed *verbatim* from Leibniz. When Maimon says, for instance, that in "man is animal" the synthesis, or predication, signifies that "man is animal and something else", he echoes Leibniz almost word for word. Often, to be sure, it is difficult to ascertain the exact source of Maimon's "Leibnizian" pronouncements, and whether or not he took them directly from Leibniz, since many of the writings in which these and similar ideas are found were unknown in Maimon's time. However, the resemblance — there are other examples — is too striking to be coincidental. For anyone who possesses even a cursory acquaintance with Leibniz' philosophy of logic, there can be no doubt that Maimon's discussion here is thoroughly Leibnizian.

The first peculiarity that should draw our attention here is that Maimon discusses subject and predicate not, as might be expected, in the context of a theory of the *proposition*, but rather in that of a theory of the *concept*. Towards the chapter's close he evokes the question of judgment, only to say, first of all, that the judging action of the understanding is opposite to its action in creating concepts; and he adds immediately afterwards (*Tr*, II, 92) that the difference between concept and judgment is just terminological. Therefore, strangely enough, concepts (or rather the creation or emergence of concepts) and judgments are one and the same thing. A theory of judgment, a theory of concept, and a theory of predication thus comprise a single theory or, at most, different aspects of a single thematic field. If there is a difference between concept and judgment, it is solely one of degree, and what is considered a 'judgment' under a certain theoretical perspective can, under a different perspective, be considered a 'concept'. In other words, it is not the difference we (or Kant for that matter) usually think it to be: namely, an irreducible difference of logico-semantic

levels of thought and of reasoning, each having its own specific structure and playing its own specific role. For Maimon, both in judgment and in the forming of concepts, we are speaking about something we commonly call 'predication'.

This already sets the tone of the whole discussion, and it is Leibnizian through and through. For one of the main characteristics of Leibniz' philosophy of logic is that he, too, telescopes, so to speak, concept and proposition (and reasoning, as well) into one thematic whole. In other words, the structural differentiation of subject and predicate within propositions is nonessential.¹³

It should also be noted that not every act of concatenating or combining different terms into a unity possessing a sense is predication strictly speaking or (better) predication in a philosophically pertinent way. In other words, there is a discrepancy between the formal — logical and grammatical — analysis of predication and 'transcendental' theory. The latter, as a logic of the knowledge of real objects, is concerned with what Maimon calls 'objective synthesis', meaning by this the kind of predicative act that forms the foundation of the knowledge of objects. 'Objects', to be sure, are not only material entities, but also such as mathematical ones.

Although, as we have said, the spirit of the discussion is thoroughly Leibnizian, the immediate context and terminology is Kantian. Thus the predicative act whereby a concept is formed or created is called by Maimon 'synthesis'.

There is a certain vacillation in Maimon's use of the synthetic/analytic terminology. To begin with, he says that 'synthesis' characterizes the activity of the understanding in the most general and fundamental way, that it is a condition-of-possibility of consciousness (*Tr*, II, 349). It is in synthesis that 'real' concepts, i.e., concepts of real objects, are thought or (expressed more aptly) formed. He also seems to think that the distinction between synthetic and analytic propositions is secondary and relative, if not altogether redundant. However, he also identifies judgment and analysis, and thus introduces, in seeming contradiction to his previous position, a distinction between concept and judgment.

¹³ A typical pronouncement is "By this method we reduce inference to propositions and propositions to terms" (Leibniz (1903), 389). For a fuller exposition of this and similar issues, cf. Grosholz and Yakira (1998).

I shall not try to resolve these difficulties, and only note at present that the collapse of the analytic–synthetic distinction is a necessary consequence of imputing to the notion of divine or infinite intellect authentic philosophical pertinence. This, of course, is one of the main points on which Maimon parts ways with Kant, who attributed to this notion a merely regulative role. Reintroducing infinite intellect suffices, in itself, to undermine much — to put it mildly — of the Kantian enterprise, and might seem a perfectly Leibnizian move. We shall return to it later.

As limited and relative as it may be, the distinction between analysis and synthesis affords Maimon an opportunity to discuss certain elements of the predication question. This is a typical move, and it partly reflects his strategy of argumentation and partly his eclectic way of writing. Rejecting the Kantian or ‘traditional’ sense given to certain key notions, he reinterprets them in order to incorporate them into his own theory.

In discussing the difference between synthesis (or the formation of concepts) and analysis (or judgment), Maimon writes as follows (*Tr*, II, 93):

The activity of the intellect in the formation [*Bildung*] of concepts is opposite to its activity in judging. In the first case, it acts synthetically, and in the second, analytically. In order to form concepts, it starts with the universal and arrives, *by determination*, at the particular. In order to form judgments it thinks, inversely, the particular first, which it subsumes under the universal, while leaving aside the determinations.

(My italics)

However, the description of this distinction as a difference between judgment and concept is only a terminological matter (*ibid.*):

The fact is, concept and judgment are one and the same thing. If I say, for example, that a triangle can be right-angled, this affirmation means nothing but that through this action I think a concept of a right triangle. And when I say that man is animal, then this signifies that the concept of man was formed by my determination in a more specific way, the concept of animal.

Several important issues are touched upon in these quotations. One of them is what can be described as Maimon’s nominalism. What I wish to do by using this term is to draw the reader’s

attention to the very peculiar role *generality* plays in Maimon's conception of predication. As noted above, this, too, is a very Leibnizian conception. While using the notions of 'universal' and 'particular' in an ostensibly positive way, he actually aims to show that the distinction between subject and predicate should not be interpreted as one between the general and the particular. The predicate is not a universal 'applied' to a particular, to a singular or less general term. Nor does it 'include' any of these latter. A particular (referred to by the subject term) is not 'subsumed' under a general concept (the predicate); it is rather a determination of it. By specifying the concept of a triangle as a right-angled triangle, we effectuate an act on the previously given concept of 'triangle'. The essence, or condition, of what happens when we say "abc is a right-angled triangle" is not that we relate a more general representation to another, less general, representation, but that we effectuate a determining act on the concept of 'triangle'. The concept of 'right-angled triangle' is more determinate than that of 'triangle'. And this is precisely why we can say that the *formation* of a concept and *judgment* are the same — both are *acts*.

The 'universal' to which Maimon refers is the undetermined or not-yet-determined; it is not, say, a secondary substance or the name of a class of individuals. It is that which can be determined, and determination is something effected from within, so to speak; or, to put it differently, without deeming the notion of the *extension* of the concept essential for the construction of a cogent theory of the concept. When we say 'man is animal', which is a standard judgment, we do not express a relation of a larger extension and a part of it, but rather reverse the order of 'real' thought. The latter is something like: 'animal [determined into] man'.

The 'real' *subject* is the 'universal' — 'animal' in our example — for it is on this that the act of determining operates. That we 'descend' from a universal to a particular can be conceived in terms of *particularization*. It can be modeled on some class-semantics. But in this case it does not make much sense to call the universal 'subject'. A universal can be said to be a subject only if we understand the determining act as involving the whole of it, without anything being left outside in the process of determination. This kind of determination is *not* negation! Inversely, 'ascending' is not

a sort of abstraction, in which more is brought under the extension of the concept, while narrowing its comprehension (or intension).

Maimon seems to be referring here, half-implicitly, to a symmetry which allegedly obtains between what has come to be known, especially since the *Port-Royal Logic*, as the *extension* and *comprehension* (or *intension*) of an 'idea'.¹⁴ In one way or another, both Leibniz' *inesse* principle and Kant's *analytic* judgment apparently relate to what the *Port-Royal Logic* called the 'comprehension' of ideas, that is, the notion of 'inclusion', according to which ideas *include* their 'characters', and *apply* to the objects to which they refer or which 'fall under' them. According to a general scheme often encountered in the history of logic, judgment can be interpreted as the affirming of an inclusion relation, which is an act that effectuates a simultaneous narrowing down of the extension and an amplification of content of the subject term.

However, while this is the general framework of Maimon's thought, he gives it an original signification which is based, in fact, on Leibniz' conception of predication. Maimon combines the analytic/synthetic or the concept-formation/judgment distinction with the extensional/intensional distinction. But once all are explained on the basis of the notion of *determination*, it is no longer possible to apply here the metaphor of opposite acts of contraction and amplification, because, again, the latter means — contrary to what is meant by 'determination' — that in synthesis parts of the extension are continuously 'driven out', while in analysis they are 'brought in' from without. Similarly, 'synthesis' as determination cannot be considered a natural, or transcendental, activity of thought (and the putative nature of linguistic structure), consisting in uniting disparate elements which are not 'included' originally in one another; and 'analysis' cannot be considered in terms of the 'unpacking' of an included element from its including whole. If synthesis is an act of determining, analysis should be called 'un-determining'.

¹⁴ Cf. Arnauld and Nicole (1970), 1st part, ch. 6. Arnauld and Nicole introduce this as a distinction between two different characterizations of general ideas, but use it mainly in their theory of judgment (2nd part, notably ch. 3). It should be noted that this distinction is more or less implicitly present already in Aristotle.

Using another traditional notion, Maimon interprets the distinction between subject and predicate as a difference in the 'amount of reality' — the subject 'contains' more reality than the predicate. The greater or lesser 'reality' a thing contains is measured by the richness, so to speak, of the consequences deducible from it. This (or a similar) idea can be found elsewhere, notably in Malebranche, who based thereon a sort of optimization theodicy, and also, in a generalized and systematized way, in Leibniz. A link is thus established between the theories of predication and inference, which gives sense to the concept-judgment-deduction telescoping we referred to above. This is another illustration of Maimon's fundamental strategy in dealing with the question of predication, that is, the (Leibnizian) decision *not* to base his discussion on the notion of generality and the difference between the more and the less general. For it is the 'subject' that is said to produce a greater amount of, or to imply more, or to be 'richer' in, consequences; and this cannot be understood in terms of larger generality, but of a steadily growing capacity to predicate attributes, or to speak ("say something") about it. The subject's greater "richness in consequences" is simply its greater aptitude for being determined or the greater number of possibilities it has of being determined.

It is remarkable that Maimon calls the determining of the consequences of a given concept 'synthesis'. This probably means that 'consequences' are not to be conceived as something included 'from the beginning' in the concept, as its *a priori* baggage. Also that 'consequence' cannot be interpreted by turning to the extension of a concept. However, as we shall presently see, the language of 'consequence' and 'inference' is highly inexact. What the difference in the possibility of being determined does permit us to see is that 'determining' and 'determinability' are not pointing at some arbitrary acts of thought (as would be implied if 'predication' is construed as, say, 'concatenating' disparate elements [e.g., *Tr*, II, 20-1]). 'Possibility' has to be understood here *not* as a concept opening up an arbitrarily large field of determining acts, but, on the contrary, as a limiting concept.

The term 'synthesis' applies to different kinds of structures and acts of consciousness (e.g., *Tr*, II, 20-2). What interests us, however, is only one of them, probably the fundamental one. It is what can

be called *real synthesis*, i.e., the synthesis in which real objects are *determined* and which is opposed in this context to just *thinking* (e.g., of mere relations between given objects; *Tr*, II, 355). When there is a determination of an object (or rather a content) in a strict sense, we can speak of an *absolute* concept; when such a determination is absent from thought, we speak of *relative* concepts.

In his "Remarks and Explications" added to the end of the *Essay*, there is a particularly long discussion of chapter four (*Tr*, II, 378-390). It is rather difficult, sometimes puzzling, but also illuminating, since, among other things, it reveals the limited nature of Maimon's Leibnizianism. Many issues are raised, but what seems to vex him especially is the asymmetry that characterizes linguistic predication. It is not always possible to reverse the order of predication: 'black line' is meaningful, but not 'linear blackness'. Like Leibniz, Maimon does not accept language as the ultimate criterion of judgment in such matters, and does not look for a universal, possibly hidden, *grammar*, but for the structures of *thought* expressed in ostensibly grammatical form. Unlike Leibniz, however, he does not reject altogether the pertinence of the linguistic form and of the asymmetry expressed in predicative propositions.¹⁵ Like Leibniz he denies that *this* asymmetry suffices to express the asymmetry which exists between the general and the particular. Unlike Leibniz, however, he holds that the difference between 'subject' and 'predicate' is not just a matter of the discursive articulation of thought, but is rather essential for thought itself.¹⁶

The non-linguistic subject/predicate asymmetry is discussed by Maimon in terms of a distinction between the *dependent* and

¹⁵ Leibniz usually thinks within the framework of the standard predicative proposition. In some extremely interesting texts, however, he transcends this form and looks for a pure form of thought, e.g., under different forms, in the *Generales Inquisitiones*.

¹⁶ Here (*Tr*, II, 380) is one of the places in which Maimon's rejection of the common interpretation of predicative relations in terms of *generality/particularity* is most obvious. This is also what gives sense to the seemingly paradoxical claims that a predicate cannot be common to two subjects and, vice versa, a subject cannot be common to two predicates (or the same consequences cannot follow two different concepts): predication as determination is an act actualized solely within the context of a specific concept. It is done, so to speak, from within the 'subject' as an immanent act.

independent parts of synthesis. This means that linguistic analysis — semantic and syntactic — is transcended, and that the ultimate level at which the question of predication is discussed is that of a theory of thought (or, more accurately, of a transcendental theory). It is not that ‘a smiling cat’ *makes sense* and ‘a catted smile’ does not, or that only the former is constructed according to correct English syntax; the point is that ‘thought’ operates in the way expressed by the first formulation. In a sense, both phrases ‘mean’ the same; but only the first conveys adequately the determining act involved in the formation of a unified sense — or concept — that, namely, of a cat which smiles.

The subject, then, is independent; that is, we can think it outside the synthetic whole. The predicate, by contrast, is dependent on the subject, and cannot be thought without the subject. A triangle is a think-able, that is, conceivable, entity as such, whereas right angle is not comprehensible without that which is right-angled. The cat is ‘independent’, not so its smile. This seems to be an intuitively simple and well-known idea: when we say or think ‘smile’, we implicitly assume a cat (or some other subject). In fact, however, it is something else.

The distinction between the independent subject and the dependent predicate is, says Maimon, the “objective condition of synthesis in general”. This is a strong statement. As we have seen above, synthesis is the condition of possibility of consciousness (*Tr*, II, 7 *supra*). Now, it appears, we advance one step further and arrive at the condition of synthesis itself. It seems that this last distinction is supposed to capture the essence of thought itself.

Once again, Maimon’s move is explicable in terms of the idea of determination. In trying to understand his intention, one should, I think, speak here of an independence/non-independence (rather than independence/dependence) distinction. A ‘predicate’ is *non-independent*, since the very idea of a ‘determining act’ does not make sense without something to be determined. ‘Right angle’ is non-independent not because it is a sort of thing that (like a smile) cannot float in space, nor because it ‘presupposes’ a subject, but because it is the determining aspect, or moment, of a whole. It is not that it ‘needs’ a substrate, but as a determining moment it cannot exist or possess a sense without that which is determined. Inversely, the ‘whole’ exists without being determined, but

in this case it exists, or can be thought, precisely as such, that is, undetermined. Strictly speaking, the determining element is not *dependent* on the determined element in the way, say, that an effect is dependent on its cause. Even the notion of 'consequence', just referred to, is relativized here, since the dependence relation in question is not the one that is usually conceived as the relation obtaining between a consequence and its premises.

As stated above, one of the most puzzling and counter-intuitive elements of Maimon's theory of predication is the Leibnizian idea that what we call 'predication' concerns, in essence, concepts and not propositions. I would like to suggest that the main theoretical intention of this unusual position is to emphasize the resolutely *non-arbitrary* nature of thought. The complex entity we call 'real concept' is neither a simple juxtaposition of disparate elements, simply brought together under a unity of thought, consciousness, or linguistic structure; nor does it acquire its unity by the act of *referring* to an independently existent object or content which, because exterior, always remains a *given* and, hence, arbitrary.

A real concept, or a concept of a real object, is a *systematic* whole. Its systematicity belongs at one and the same time to the 'concept' and to the 'object', the distinction between the two being relative. The ground of the non-arbitrariness of the predicative act is lawfulness, which belongs neither to the object nor to the synthetic unity of consciousness, but to thought as an activity of determination. This position is not a relativist or subjectivist position, because the whole matter takes place within the field defined by the concept of predication qua determination, and because it is possible to formulate a formal theory of predication which would show, by its rigorosity and effectiveness,¹⁷ its objective nature. Objectivity does not consist in a relation to an 'externally' existent object - either externally in a sense of 'out there', in a world outside the interiority of consciousness, or in the sense of extensionality which, even without supposing an 'outside' world, defines truth nonetheless as a relation to an irreducible object and on the ground of duality of thought and object, subject and predicate. Maimon's criticism of the Kantian notion of the 'thing-in-itself' is

¹⁷ As Cassirer (1920), 83, rightly remarks, *imaginary numbers* become *objects* not because they *are*, but because we can talk about them rationally.

conducted in this spirit: this term does not designate an absolute, ontologically and conceptually irreducible mode of being, which is wholly other than the object as we know it or from 'phenomena', but which is, nonetheless, their ground or perhaps even their cause. It applies to an inner aspect of the process of knowledge. For Maimon, the fully systematized object is, insofar as there is never full appropriation of the possibilities of rational knowledge, a limit concept.

This is true in a general way, but it also applies in a particular, paradigmatic way to mathematical objects. Thus, the property of a triangle to be right-angled is not just the juxtaposing of one thing (the angle) next to another (a figure made of three lines). The predicate actually determines the subject because it does so in a systematic way, governed by a certain rationality which consists in an endlessly applicable rule of operation, which is conditioned by the triangle.

To summarize what has been said so far: predication is determination; and determination is Maimon's principle of principles; i.e., it captures the essence of thought. The relation between subject and predicate is not to be construed in terms of the general and the particular or of the one and the many; it is not a relation expressing the inherence of a property in a substrate. Predication is not basically 'saying something of something'; the entity we call 'real concept' is not a juxtaposition of disparate elements, brought together under the unity of thought, consciousness, or linguistic structure; it also does not acquire its unity by the fact and act of *referring* to an independently existent object. Concept and judgment are two aspects of what we call 'determination'; they do not belong to different theoretical domains governed by different theoretical principles. Concepts are formed by way of determination, determination is an act of thought, and it is not dependent on anything which exists beyond the field of thought. All this is perfectly Leibnizian.

From Kant to Leibniz?

Maimon parts ways with Kant in his conception of the nature of predication. He appropriates Kant's terminology, but radically transforms its significance. Moreover, despite his intense interest

in how this issue was dealt with historically (see, for example, his commentary on Aristotle's *Categories*), and despite his frequent use of important elements of the traditional discussion, Maimon's position goes against the mainstream in many respects, and much of this nonconformity is traceable to Leibniz.

However, transcendental philosophy erected a barrier on the way back to Leibniz. Maimon's discussion of the 'thing-in-itself' is one point where this becomes apparent. Maimon surpasses Kant's thinking about the 'thing-in-itself' by bringing it down from metaphysical skies to the rational theory of predication. The 'thing-in-itself' becomes an immanent element of predication understood as an *act* of determination. The 'object' is indeed conceived as the 'object=x', but in a sense which is at once more radical and less metaphysical than in Kant. It is, for Maimon, a 'limit concept' which aids in understanding the nature of rational knowledge.¹⁸ It essentially describes thought as a process whereby truth grows within the ongoing activity of synthesis, without, however, ever reaching full determination (e.g., *Tr*, II, 204-6).

For Leibniz, truth is defined by the *inesse* principle, which states that in every true proposition the predicate term 'is-in' (*inesse*) the subject term. This famous statement does not express a doctrine about the 'analytical' character of all reasoning and truth, as it is often — wrongly and anachronistically — interpreted. It is also not a theory about the 'synthetic' nature of thought. Thought, for Leibniz, is not a matter of *work* performed by the 'mind', 'understanding', etc. on an external given; in particular, it is not a unity-conferring activity — unity is the condition of sense, not the outcome of the work of thought.

The term 'synthesis' is complex and equivocal. In order to neutralize its psychologistic connotations and reach the real philosophical issues at stake between Leibniz and Maimon, one should perhaps have recourse to the notion of *act*. Kant's 'synthesis' allows the introduction of this notion (which I was using all

¹⁸ As an anonymous reader of this paper has remarked, Kant's notion of the *thing-in-itself* has been variously interpreted, sometimes in ways rather similar to Maimon's use of the term. Without entering into a full discussion of this complicated issue here, I shall only say that — at least from Maimon's own point of view and according to his interpretation of Kant — there is an explicit intention on Kant's part to overcome what he (Kant) sees as vestiges of metaphysical language within what he considers a "theory of reason".

along), which becomes essential for him for understanding what sense, thought, truth, and knowledge are. Accordingly, Leibniz' *in esse* theory should not be considered a theory about the 'informative emptiness' of all propositions or judgments, but as one affirming the complete priority of *content* over *act* in the economy of thought. Maimon's (and Kant's) transcendentalism reverses the order.

Now Maimon, unlike Kant and Leibniz, thinks about synthesis in terms of emergence and process. It does not occur, however, in historic time. It belongs, in essence, to the structure of sense. Predication qua Determination is a sort of engendering — the determined subject and the determining predicate are the dual aspects of an engendered real thinkable content. Although the issue is not completely clear, Maimon, I think, was well aware of the dangers of psychologism and of the fact that Kant had not been able to overcome it fully. The 'engendering' we are talking about should not be construed as a temporal deed, but as an *act*, which has to be understood in more or less formal terms. It implies an irreducible distinction between the content of a concept (the 'object') and something else, which is the essential and necessary condition of this content being thought. Maimon, so it seems, belongs to the post-Kantian tradition which eventuates in Husserl's conception of the *transcendental*. He qualifies this act as essentially an *act* of determination, and (while not using the term) his act of determination is conditioned by a sort of 'horizon'. We can thus speak in terms of *determined* object in this context; it means not just a *determinate* content of thought, but also, more precisely, an object, a content or concept being *arrived at*. In other words, it is a *resultant* or the *result* of an act of determination. As such, it is not only a structure, but also (to employ Husserl's term) an *accomplishment*. It is precisely this element of transcendental theory which is totally alien to Leibniz' thought. The determinate for him is not a result of an act, but the original and essential nature of real thinkable entities.

Maimon accepts the Kantian idea that 'thought' is essentially a matter of lawful unity in diversity (*Tr*, II, 21). The importance of the notion of law and lawfulness in Kant's theory of rational knowledge does not need much comment. It is not less important for Leibniz, but Maimon's use of this notion is transcendental and

no longer Leibnizian, and it is here that the limits of Maimon's Leibnizianism become apparent. Despite his clear affinities with Leibniz' discussion, Maimon remains, in the final analysis, outside the 'Leibnizian universe'. For Leibniz, a rule or a law of a series, for example, is not prior to the series in a sense comparable to that in which a cause is prior to its effect. For him, talking of a series as 'emerging' out of its law is, at best, a metaphor. It is decidedly *not* a prescription for a course of action, concrete or ideal. Finally, a rule or a law is not an act. It is an *expression* of the unity or identity of a thing. It is its distinct way of expressing being, the particular 'point of view' from which it expresses 'the world', and which constitutes its individuality. This is why God can see the whole series in one glance, so to speak, and does not have to actually engender or calculate it.

Despite the differences in their respective understanding of the metaphor of God's knowledge, for both Kant and Maimon it becomes divorced from its Leibnizian context, which radically alters its significance. The order of priorities is reversed. For Leibniz, the metaphor draws its pertinence from its priority over the concept of human knowledge, from, differently put, his (Leibniz') 'Platonism'. Actually, it signifies a priority of the concept of *truth* over that of *knowledge*. With Kant's transcendentalism it turns into an ideal of reason; for Maimon it receives its pertinence by a sort of extrapolation or generalization from the concept of knowledge, which critical philosophy shows to be essentially finite.

It is precisely in the sense given to 'determination' as process and emergence that the difference between Maimon and Leibniz becomes apparent. The *principle of determinability*, Maimon says, is "the highest principle of all real thought" (*KrU*, 146 [VII, 148]; cited by Bergman (1967), 96); it is, according to a phrase of Kuntze that Bergman cites approvingly in his monograph on Maimon, the "pivotal point in Maimon's entire system" (*ibid.*, 96-7). Whether we accept or qualify this statement, there is no doubt that it is a central element of Maimon's thought. Bergman (*ibid.*, 97) adds that if, for Leibniz, the highest principle of transcendental logic had been the principle of reason, and, for Kant, the transcendental unity of apperception, for Maimon it was the principle of determination. It cannot really be said, however, that Leibniz had a transcendental logic; his principle of reason is also a principle of

determination. But if Maimon's own principle of determination is perhaps the most important element of his Leibnizianism, he turned it into other than it had been in Leibniz: namely, a transcendental principle. What Bergman's remark really shows is that the exact meaning of Leibniz' notion of 'determination' is lost when Leibniz is read backwards, so to speak, from a more or less Kantian perspective.

In fact, determination can be said to be not only Maimon's highest principle, but Leibniz' as well. This is far from being a simple statement, but I cannot elaborate it here; I shall restrict myself to saying that this is what constitutes, to my mind, the core of Leibniz' theory of the *principle of reason*. A major consequence thereof is that every existent thing has a complete concept. A 'complete concept' is, of course, none other than a fully determinate concept. It has no lacunae in it, which is what defines 'real' concepts, that is, concepts of existent things. Existence is determinateness, which means, among many other things, that the determinateness qualifies 'real' concepts independently of their synthesis, that is independently of knowledge or of the work of thought. In order to avoid any mystification, we could say that such a concept, that is, conceivable content of thought, is not to be construed on the basis of a presupposition of the notion of engendering. But that is precisely what Maimon does when he thinks of predication qua determination in terms of process and engendering.

For both Leibniz and Maimon, the concept — or principle — of determination is a foundation for a theory of reason. But unlike Maimon's transcendental philosophy, Leibniz' philosophy does not make knowledge its primary objective, and it does not pose the concept of *knowledge* or, more precisely, of *rational knowledge*, as primary. Predication qua determination is not a precondition of the possibility of science, but rather precedes it as a principle of an ontology of existence and a metaphysics of reason.

Determination, as we have reiterated over and again, is conceived by both Leibniz and Maimon as a notion implying systematicity. Unlike Kant, they think this systematicity according to more or less articulated mathematical models. For Leibniz it is the foundation of a general theory of rationality which leads to his famous idea that there is always — in principle, at least, if not in

practice — a procedure for deciding the truth of a question. In essence, such procedures are always forms of calculation. Leibniz, as we know, was always hoping to devise effective methods for the resolution of disagreements or controversies. *Calculemus!* is what we should eventually be able to say whenever we dispute the truth of a statement, a theory, or a position.

It is precisely this 'optimism' which marks the limit of Maimon's Leibnizianism. It is not, however, facile resistance to Panglossian optimism (seemingly implied in the *Calculemus!* exhortation) that is at stake here. Although Leibniz was never, in my opinion, an optimist of this kind, I cannot argue this position at present. Nor are we concerned with the skepticism Maimon supposedly set in opposition to it. It is not *that* which barred his way back to Leibniz. There are higher philosophical issues at play, and it is to Maimon's credit that he brought this to the fore.

The 'optimism' which separates Leibniz and Maimon concerns the nature of reason. The metaphor of God's intellect, which is integral to Leibniz' optimism, changes its sense with Maimon. Instead of a foundation for a theory of *reason*, it becomes a transcendental condition of a theory of *knowledge*. As such, it is not prior to the concept of human, finite knowledge, as with Leibniz, but is based on it, and comprises a sort of extrapolation from it. It is, as Maimon calls it, a limit concept.

If we need to explicate the metaphor of divine intelligence in its Leibnizian context, we could perhaps say that it signifies a hypothesis about the primacy of the concept of *intelligibility*. The particularity of Leibniz' theory of reason — of his theory of predication and of his principle of determination, *inter alia* — is that it constitutes an attempt (perhaps unique both in its scope and depth) to combine the ancient ideal of knowledge as *comprehension* or *understanding* with the kind of rationality embodied in modern science. *Comprehension* signifies, among other things, that what can be loosely described as 'relation of interiority' obtains between concepts and objects. Metaphysically, as Leibniz repeatedly insists, *sub specie aeternitatis*, or from God's point of view, there are no *extrinsic denominations*.

But modern science seems to refute this ideal of interiority of concept and object. While taking some of his central insights and arguments from Malebranche, it was Hume who first explicitly and

forcefully voiced this refutation of the ideal; Kant answered the skepticism which Hume accounted the inevitable consequence of the essential impossibility to attain to any interiority in, for example, causal relations. But he did not oppose the Humean idea of exteriority; this is the sense of his conception of predication as qualification, referred to above. Knowledge is essentially exterior to the things known, not, however, because of a skeptical affirmation of an incapacity to attain interiority, but because the very concept of *knowledge*, as its transcendental analysis shows, means such an exteriority.

Maimon's conception of predication belongs to this epistemological logic of exteriority. It does not express itself in a Kantian dualism of object and concept, but in the essential role *time* plays in his conception of the ultimate condition of possibility of thought: predication is a *process* of determination. For Leibniz time was a relation, posterior to monads. And as a monad is first and foremost an existent (or the fundamental constituent of a world of existents), it is clear that Leibniz' theory of predication forms part of a metaphysics of comprehension. Comprehension is a relation to existence; and existence is defined by Leibniz as determination: to exist is to be fully determinate. Determinateness is the main criterion distinguishing between the real and the unreal, the fictional, the imaginary. Insofar as the concept of determination and determinateness expresses — for Leibniz as much as for Maimon — the idea of non-arbitrariness, it can be said to be — for Leibniz but no longer for Maimon! — a principle of the rationality of being. For Maimon it would become a theory of rational knowledge; and rationality can be analyzed, but not reduced to existence. For Leibniz determination is a principle of rational knowledge, because determinateness is a principle of the rationality of being; it is, in other words, a principle of what Leibniz calls *Theodicy*. For Maimon it is a transcendental principle — the highest principle of scientific rationality —, not a metaphysical one. But, precisely through the acumen of his criticism of Kant, and precisely because he uses Leibnizian ideas to overcome, in particular, the ever-present psychologism of Kant's philosophy of the transcendental subject, he contributes decisively to the consolidation of the transcendental turn.

SALOMON MAIMON'S PHILOSOPHY AND ITS PLACE IN THE ENLIGHTENMENT

Wandering in the Land of Difference

MICHAEL ROUBACH

The notion of difference (*Verschiedenheit*) plays an essential part in Salomon Maimon's philosophy, and is related to other major themes he develops: the relation between time and space as the forms of intuition and logic, the link between logic and transcendental philosophy, the role of the differential, etc. One could even say that his elaboration of this notion is one of his prime contributions to philosophy. The problems that arise thereby serve to explicate the difficulty, even impossibility, of a simple return to Leibniz after Kant. The purpose of this paper is to show how the problems attending the notion of difference limit the possible interpretations of infinite intellect in Maimon's philosophy. In the first part, I will examine Maimon's reflections on the notion of difference. I will begin by looking at Kant's notion of real opposition, since I think it constitutes a necessary background for understanding the main issues connected with Maimon's working out of his notion of difference. In the second part, I will propose several interpretations of logic and infinite intellect in Maimon, given the constraints that the notion of difference imposes on a possible elaboration of logic. Finally, I will reduce these interpretations to two: the first belongs to the set of options suggested by Kant's philosophy; the second represents, in my opinion, Maimon's unique contribution to the ongoing process of understanding the notion of difference.

The Problem of Difference in Kant

One of the major impulses of Kant's philosophy is that some differences are not reducible to logical ones, i.e., they cannot be construed as contrary predicates to a subject. This insight already appears in the pre-critical period. In his "Attempt to Introduce the

Concept of Negative Magnitudes into Philosophy" (1763), he distinguishes between logical opposition — contradiction — and real opposition. Examples of real oppositions are the distinctions between positive and negative numbers, between good and evil, and between two forces exerting in opposite directions. These two kinds of oppositions correspond to two notions of nothing: in a logical opposition the unity of the opposed — the contradiction — is a *nihil negativum*; in a real opposition the nothing that results from the unity of two opposite forces or the addition of positive and negative numbers is a *nihil privativum*.

In the *Critique of Pure Reason* there are two main distinctions interpretable as continuations of Kant's pre-critical claim that not every opposition is a logical one: the distinction between general and transcendental logic; and the distinction between intuition and concept. Let us begin with the second one! In an appendix to the transcendental analytic entitled "The Amphiboly of the Concepts of Reflection", Kant uses the distinction between intuition and concept as a framework for differentiating between *Nihil privativum* and *Nihil negativum*: the former is interpreted as an empty object of a concept. As examples of empty objects he cites a shadow or cold. *Nihil negativum* is interpreted as an empty object without concept. In addition to these notions, attested in his pre-critical writings, Kant adds two new notions of nothingness (*CpR*, A 292/B 348): *ens rationis* (concept without intuition) and *ens imaginarium* (intuition without object).

Logic is thus limited in its scope in both the pre-critical period and in the *Critique*. There are differences or oppositions which cannot be reduced to the logical opposition between affirmation and negation. But what about logic itself? Is it influenced by the need to distinguish between real and logical oppositions? There are two main possibilities of interpreting logic in Kant:

1. Logic continues to be interpreted in the traditional mode (note Kant's famous saying that logic is complete), but it is a limited tool that must be supplemented by the forms of intuition (space and time), which constitute the frameworks of real differences. For example, Kant claims that differences in space and time cannot be fully conceptualized (*CpR*, A 270/B 326).

2. Logic should be revolutionized, since it is now understood through its relation to sensibility. Under this interpretation, real oppositions play a role in logic itself. For example, in the table of judgments negation is classified among the judgments of quality (*CpR*, A 70/B 95). These judgments consist of three and not two kinds (affirmative, negative, and infinite). This distribution of judgments suggests that even in transcendental logic a dichotomy between affirmation and negation is inadequate.

This tension between the two possible interpretations can be expressed in the following question: What is the exact relation between transcendental and general logic, since, in the latter, Kant largely abides by the traditional logic of his predecessors?

Kant left this tension unresolved, which allows for two interpretations of his philosophy in the critical period. If logic is conceived traditionally, then real oppositions are limited to spatial and temporal differences, whereas logical oppositions are based on the law of contradiction. This line of interpretation tends to close the gap between Leibniz and Kant, since, for Leibniz, human cognition is also limited, and there will always be a residue of differences for it which cannot be reduced to logical oppositions. According to Leibniz, humans are incapable of proving that contingent truths follow from the law of contradiction.¹

But if logic itself is not based solely on the law of contradiction, but rather presupposes differences irreducible to the law of contradiction, then the gap between Kant and Leibniz widens. In Kant's philosophy, logic presupposes finitude, since the distinction between logic and sensibility is itself an outcome of human finitude. This interpretation follows from Kant's notion of intellectual intuition. This form of intuition, unavailable to man, is opposed not only to human intuition but to human thought in general. This second line of interpretation will claim that negation is primarily a transcendental notion, since the law of contradiction presupposes oppositions irreducible to logical ones. Let me explain this by examining the chapter on the transcendental ideal in the *Critique of Pure Reason*. Here Kant discusses the issue of the

¹ Leibniz (1973).

determinability of concepts. He begins by claiming that the principle of determinability, whereby “of *every two* contradictorily opposed predicates only one can belong to a concept” (*CpR*, A 571/B 599), is based on the law of contradiction. Later, however, he argues that this principle presumes a transcendental presupposition: the idea of the sum-total of all possibilities (*CpR*, A 573/B 601). This condition undermines the autonomy of the law of contradiction, since it also presupposes the distinction between affirmation and negation. The concepts that include negation in their definitions are derivative in that they depend on affirmation. Affirmation is understood transcendently as reality. Hence, the opposition between affirmation and negation is not primarily a logical one, but presupposes a transcendental condition.

We have so far examined two possibilities of interpreting the notion of opposition in Kant's philosophy. The first is that there are differences which are not reducible to a logical opposition, whereby logical opposition maintains an autonomous status. The second is that logical opposition itself presupposes a transcendental condition, so that, in a certain sense, all oppositions are real. In the *Critique*, however, we can identify a third possibility, one based on Kant's reflective concepts. In his “Amphiboly”, he introduces four pairs of reflective concepts (*CpR*, A 261/B 317): identity and difference, agreement and opposition, inner and outer, and determinable and determination. These concepts apply both to the understanding and to the forms of intuition, and hence can function as Kant's general logic.

The role of the concepts of reflection in the framework of the *Critique* can be interpreted in two ways:

1. They appear in an appendix to the “Transcendental Analytic”, whereby they presuppose the distinction between sensibility and logic. As such, these concepts do not challenge the view that for Kant a logical opposition between affirmation and negation is the basic logical opposition. In other words, the reflective notion of opposition presupposes the notion of opposition of the “Transcendental Analytic”.
2. The reflective concepts comprise the basic logical stratum, forming, for instance, the ground for the table of judgments and hence for the table of the categories. As such, the notion

of opposition is also or even primarily a logical concept, and the logical sphere contains a variety of oppositions.²

Maimon's Notion of Difference and Its Role in Logic

In Maimon's philosophy the notion of difference plays a central role. His main preoccupation is whether differences can be reduced to logical oppositions based on affirmation and negation. The solution he proposes has implications for his views concerning the possibility of reducing the forms of intuition (space and time) to logical relations, as well as for those concerning the exact relation between logic and transcendental philosophy.³

At the beginning of his "Essay on New Logic" (*Logik*, V, 21), Maimon argues that a separation between general and transcendental logic implies the subordination of the former to the latter, since the meaning of affirmation and negation is given by transcendental philosophy (reality and negation). This claim comprises one of the consequences of his analysis of identity and difference in his "Essay on Transcendental Philosophy". He develops his position via a critique of Baumgarten's assertion that difference is reducible to logical negation: two things are different if a determination applies to x but not to y .⁴ Maimon argues that in order to establish this opposition we need a common ground from which it can arise (*Tr*, II, 344-5). Every difference presupposes an identity in some respect. But this characterization is problematic! The issue can be clarified by means of an example. Let x and y be two different objects and A and B two different properties. The difference between x and y is based on the fact that A applies to x and y while B applies only to y . The ground of the difference between x and y lies in the difference between A and B . Let us assume that B is not the negation of A (we will consider this option later). Then, according to Baumgarten's principle, A and B must have a common property C . Now $A=C+A'$ and $B=C+B'$. But now we need a ground for the difference between A' and B' . Again, either A' is

² Longuenesse (1993) interprets Kant's philosophy in this mode.

³ On Maimon's interpretation of space and time as forms of difference, see (in this volume): P. Thielke, "Forms of Intuition and Forms of Difference: Kant and Maimon on Space and Time".

⁴ Baumgarten (1766), § 33.

the logical negation of B' or there is a new ground for the difference D. This procedure suggests a possible elimination of difference through an infinite analysis. Still, we are left with two problems. First, how is a multiplicity of properties possible? In our example we have to establish the difference between C and D as well. Once again, we will need to adopt the same procedure. But it seems that either there is only one property and its negation or we need to assume a notion of opposition that is not reduced to a logical opposition. Second, what about the relation between affirmation and negation itself? It is not based on negation, since negation is only one side of this relation. Hence, it is an opposition irreducible to logical opposition (*Tr*, II, 117).

As a result of these arguments, we can propose two ways of interpreting the notions of identity, difference, affirmation and negation in Maimon's philosophy. Difference and negation are coupled in both. Either both notions are logical or both are based on real oppositions. These options can be explained by using Maimon's distinction between formal and real thought. In real thought an object is determined. In formal thought the subject and predicate do not determine any object, but a relation between them is established. The first approach to the notions of identity and difference, affirmation and negation, is to see them as mutually dependent. Their relations do not determine anything (*Logik*, V, 80-81). Hence, their relation corresponds to Maimon's characterization of formal thought.

The second option is that there is an absolute difference and a real distinction between affirmation and negation. The real distinction between affirmation and negation is based on the difference between reality and negation. In a note to his "Essay on New Logic", Maimon proposes interpreting the distinction between reality and negation as being based on a transcendental opposition in intuition, such as obtains between light and darkness (*Logik*, V, 345). As such, real differences are a necessary condition of thought, which is the determination of these differences. Hence, the relation between affirmation, negation, and difference is based on Maimon's conception of real thought (*Logik*, V, 79).

Now the question arises as to the relation between real and formal thought. It is a key question, and has two main answers. The first is that they are mutually dependent. Formal thought

presupposes real thought and real thought presupposes formal thought. In “The Categories of Aristotle” (*KdA.*, VI, 141), Maimon claims that transcendental philosophy and logic are mutually dependent. But since mutual dependency is the characterization of formal thought, it follows that real thought presupposes formal thought.⁵ The second answer is that formal thought presupposes real thought, whereby there will always be a residue of something given to the thought. Thinking is about something.

These two options correspond to the two ways proposed above of interpreting the role played by reflective concepts in Kant:

1. The concepts of reflection presuppose the “transcendental analytic” and the distinction between sensibility and understanding. In Maimon’s words, they presuppose real thought.
2. The concepts of reflection can function as the ground for the table of judgments. In Maimon’s words, they are a formal precondition to real thought.

If these are indeed the options Maimon proposes, then we have not moved significantly away from Kant.⁶ We are back to a Kantian opposition between two interpretations. But what if Maimon offers a third possibility? I think he does, although it is merely adumbrated and not fully developed. I will try to explain this option with reference to Gilles Deleuze’s *Difference and Repetition*.

Infinite Intellect and the Notion of the Differential

In order to understand this option we must turn to Maimon’s notion of the differential and its relation to infinite intellect. There are two main ways to interpret his notion of the differential. The first is to consider it the residue of the determined thing; it is the determinable but undetermined thing (*Tr*, II, 351). Since the differential is related in Maimon’s philosophy to infinite intellect, this interpretation will tend to see in the differential the object of

⁵ Here I disagree with Frederick Beiser, who argues that in Maimon’s philosophy formal logic presupposes transcendental philosophy: Beiser (1987), 311.

⁶ Martial Gueroult has pointed to these two options, but he sees only the first as arising from Kant’s philosophy. He characterizes the second as “Hegelian”; see Guérout (1929), 78.

infinite intellect, whereby the distinction between determination and the determinable object is maintained in infinite intellect.⁷

This approach fits the first option of interpreting Maimon's notion of logic. The infinite intellect maintains the form of real thought. Even in infinite intellect determinations are made with predicates and their negations. There is, in this respect, no real distinction between finite and infinite intellect; it is a distinction of quantity, not of quality. There are several indications in Maimon's writings that this was, in fact, his interpretation of infinite intellect. For example, he claims that *our* intellect is a limited form of infinite intellect (*Tr*, II, 65), and that the finite and infinite intellects have the same form (*Tr*, II, 100). As such, it seems that Maimon does not offer an alternative to Baumgarten's characterization of the relation between negation and difference, but merely claims that even infinite intellect presupposes a notion of difference, i.e., the differential.

A second approach to interpreting the differential is to focus on the relation between dx and dy and on the distinction between this relation and predication. In the relation between dx and dy there is no distinction between the determining and determined component. Only the relation as a whole determines something. This structure is also suggested by Maimon's treatment of natural numbers. Every number is only determined by its place within the whole of natural numbers (*Tr*, II, 190; *Logik*, V, 288). In this mutual determination we do not necessarily have something given as a residue.⁸

This example enables us to characterize infinite intellect in a new way. In the infinite intellect, the mutual determination of, say, dx and dy , determines, or produces, the object. In the natural number series, every number is determined by the whole series.⁹ Hence, in the infinite intellect, thought transcends the distinction between formal thought (mutual determination) and real thought (the distinction between determined and determination).

⁷ Atlas adopts this interpretation of the differential. See Atlas (1964), 117-118.

⁸ On Maimon's view concerning numbers and its relation to the structuralist interpretation of mathematics, see Buzaglo (2002), 139-147.

⁹ Bergman relates the notion of infinite intellect to the number series, but does not draw significant conclusions from the comparison. He does not point to the tension between this view and the interpretation of infinite intellect as being identical in its form to finite intellect. See Bergman (1967), 68.

The role of the differential in the infinite intellect is not just to be the determinable, but also to change the conception of the predicates. The predicates of the infinite intellect are differences. They are characterized through the difference between one predicate and another. This conception solves one of the main problems Maimon raised concerning the possibility of reducing difference to logical opposition: that the elimination of the difference between predicates would leave us with one predicate and its negation. The contribution of the notion of differential to the solution of this problem is that the realm of the predicates can be interpreted as their (the predicates') mutual determination. In the infinite intellect the realm of the predicates is analogous to the series of natural numbers. This position is implied in Maimon's claim that the understanding can use the form of difference only when the objects are produced, i.e., only when the understanding is an infinite one (*PhW*, III, 40).

Under this interpretation of the differential and infinite intellect there is a qualitative distinction between finite and infinite intellect. It is not contained, in my opinion, in the Kantian options of understanding the relation between general and transcendental logic, and thus it forms Maimon's unique contribution to understanding the relation between logic and reality. Bridging the gap between logic and reality is effected by a transformation of thought itself.

Maimon himself, however, did not develop this new understanding of the infinite intellect. Furthermore, he maintained the first option, i.e., that there is no qualitative distinction between finite and infinite intellect, which clearly contradicts it. Working out the other option lies beyond the scope of this paper. It entails going into Deleuze's reflections in *Difference and Repetition*,¹⁰ but I hope I have succeeded in showing that Maimon has pointed to a possible path out of Kantian philosophy without having to resort to Hegel's logic. It comprises a philosophy based on the notion of difference.

¹⁰ Deleuze (1994), chs. 1 & 4. In the first chapter Deleuze develops his own analysis of difference, and in the fourth chapter he relates it to Maimon's notions of differential and infinite intellect.

INTUITION AND DIVERSITY:
KANT AND MAIMON ON SPACE AND TIME

PETER THIELKE

At the heart of Kant's critical idealism lies the notion that human cognition is discursive, precisely because it involves the *process* of thought. Experience arises not simply from the reception of data, but also requires the spontaneous activity of judgment, whereby these data are 'taken up' in thought. According to this 'discursivity thesis,'¹ cognition requires two separate elements: a receptive component provided by sensibility, and a conceptual component provided by the understanding. Moreover, the faculties of sensibility and of the understanding are both necessary for cognition and yet mutually irreducible. The two powers, Kant writes in a famous passage, "cannot exchange their functions. The understanding can intuit nothing, the senses can think nothing" (*CpR*, A 51/B 75).

While the centrality of discursivity to Kant's idealism is apparent, what justification can be provided for the discursivity thesis? On the face of it, such a question might appear odd, since experience itself seems to bear out the notion of discursivity.² Salomon Maimon, however, is not so optimistic about the prospects of Kant's position, for it is based, he claims, on a suspicious assumption about experience and cognition. This is what I will call Maimon's Challenge: Kant's critical idealism rests upon an unwarranted and unstable foundational claim about the nature of cognition. And, according to Maimon, the exposure of this illegitimate assumption undermines Kant's attempt to secure a foundation for empirical knowledge.

¹ The term 'discursivity thesis' is drawn from Henry Allison (1996), 6.

² It is interesting to note, however, that even a commentator as sympathetic as Allison admits that Kant notoriously "assumes rather than argues for the discursivity thesis, even while insisting that it is not the only conceivable kind of cognition. Like so much else in his philosophy, he seems to regard it as an ultimate 'fact,' for which no explanation is either possible or necessary" (Allison (1996), 6).

Although a complete analysis of Maimon's Challenge would obviously require an extended treatment of Kant's entire system, in this essay I intend to focus only on the arguments Kant offers in the Aesthetic section of the first *Critique* in support of the position that space and time are pure forms of intuition. It must be emphasized, however, that behind the discussion of space and time lies the more central issue of the *heterogeneity* of the faculties, which, as I shall argue, forms the core of Maimon's objections to Kant. At stake is the question of whether *separate* faculties can nevertheless interact so as to produce experience, and it is with the analysis of the Aesthetic that this debate begins to unfold.

Beyond its place in the debate about the role of discursivity, the issue of the status of space and time is especially important, because if Kant's arguments in the Aesthetic are successful, one pillar of the critical philosophy would be securely anchored. In response to this possibility, I will develop what I see as Maimon's 'neglected alternative,' namely that space and time are not forms of intuition, but rather can be understood as forms of *diversity*. This position escapes the obvious objections Kant levels against the Leibnizian explanation of space and time, while retaining the general tenor of the rationalist party line. Such an alternative, of course, would cast doubt upon the adequacy of Kant's eliminative arguments in the Aesthetic. This becomes clearest, I will suggest, when the *reasons* that motivate Maimon's account are recognized — reasons that are fundamentally opposed to Kant's discursivity thesis.

All of this means, however, that far from settling the question of the legitimacy of discursivity, the arguments about space and time — and especially the role of diversity — ultimately serve to point toward the issues that arise when Kant attempts to connect intuitions to pure concepts. The aim of the essay is then not to settle the issue of the nature of space and time, but to show that the arguments of the Aesthetic do not nip Maimon's Challenge in the bud. Maimon perhaps does not show that Kant is wrong — but neither does the Aesthetic vindicate Kant's assumption of discursivity.

I. *Maimon's 'Neglected Alternative'*

At the end of the 'Introduction' to the *Critique*, Kant notes that sensibility belongs to transcendental philosophy insofar as it "may

be found to contain a priori representations constituting the condition under which objects are given to us" (*CpR*, A 16/B 30). Although at first glance this might seem an innocuous claim, within it lies the seed of the doctrine of the transcendental ideality of space and time. The very *possibility* that sensibility contains its own formal properties already marks a radical break from the positions of both the rationalists and the empiricists, for neither camp acknowledges any subjective, yet *formal*, components in the reception of data.

The Aesthetic can then be viewed as an attempt to show not merely the possibility of an a priori condition of sensibility, but to demonstrate that such a condition is necessary for cognition. The crucial notion in this argument is that of a pure intuition, for if, as Kant defines it, an intuition is that which immediately relates to a given object, a pure intuition is one "in which there is nothing that belongs to sensation" (*CpR*, A 20/B 34). This form must then be provided not by the data of the senses, but rather is to be found in the mind a priori.

It is important to note that Kant's strategy in establishing the role of pure intuitions involves an argument by *abstraction*: if we remove from a representation of an object all the contributions of the understanding — substance, force, divisibility, and so on — as well as all sensory material, we are still left with the intuitions of extension and figure. These are pure, Kant claims, because they exist in the mind a priori, even without "any actual object of the senses or of sensation" (*CpR*, A 21/B 35). The Aesthetic will then follow this methodology, first by isolating sensibility from the understanding, and then by separating any sensory content from the formal features of an empirical intuition. In so doing, Kant argues, we will find "two forms of sensible intuition, serving as principles of a priori knowledge, namely space and time" (*CpR*, A 22/B 36).

The general argument of the Aesthetic proceeds by elimination. Kant claims that when we abstract from the content of an empirical intuition, we are left with the pure intuitive forms of extension and figure, but this alone does not license the claim that space and time are in fact these pure forms of intuition. Indeed, on their face space and time seem much more plausibly viewed as independent entities, as the Newtonians would have it, or simply relations

amongst objects, as the Leibnizians would hold. Kant's argument for the identification of space and time with the pure forms of intuition then must proceed by showing that despite their initial appeal, neither of these two other positions is suitable to account for the character of our representation of space and time.

The claim that Maimon provides a fourth, unaddressed alternative to Kant's ostensibly exhaustive options in the Aesthetic might seem at odds with Maimon's first discussion of space and time in the *Versuch*. Kant, he writes, "asserts that [space and time] are the forms of our sensibility, and here I am completely of the same opinion." However, Maimon immediately adds that "these particular forms of our sensibility have their ground in the universal forms of our thought in general" (*Tr*, II, 15-6). This brief qualification provides a hint of Maimon's general strategy in his account of space and time. He will argue, following Kant, that space and time must be *formal* components of cognition, and not concepts abstracted from the relations of objects. But he will part company from Kant in asserting that these forms must be understood as features of the general function of *thought*, and not as grounded in a separate faculty of intuition.

Unfortunately, like many of Maimon's views, the tantalizing hints we find about space and time are often not developed in a rigorous, or even particularly satisfying way. Given this state of affairs, what I offer below is an attempt to make Maimon's case as compelling as possible, which in turn demands that a fair amount of reconstruction and conjecture about what is truly meant by often obscure claims must be developed. In order to present Maimon in the best light possible, I will also draw upon several of Maimon's texts, for while the views remain generally consistent across Maimon's work, different points are emphasized in different places. Finally, in the interests of clarity — and following a great deal of exegetical precedent in the literature on Kant — I will concentrate for the most part on the notion of space.

A. *Two problems with pure forms of intuition*

Although Maimon agrees with Kant that space is a form, he diverges from the critical philosophy about the kind of form space is. This in part stems from Maimon's concerns about the cogency

of Kant's own position.³ Whereas Kant insists that space is a form of intuition, Maimon offers two general reasons to think that this account is suspicious. The first is directed at a methodological point, and the second at the notion of the *content* of intuition.

1. An ungrounded abstraction

Kant's arguments for considering space as a form of intuition turn on the methodological claim that the Aesthetic will abstract from an empirical intuition all contributions of both the understanding (so intuitions will be addressed apart from concepts) and the matter or content of these intuitions. Such a method, Kant suggests, will reveal the formal structure of intuitions, which can then be shown to be the pure forms of space and time.

Maimon, however, objects to this strategy, and he uses an example to make his point. Suppose we are confronted with a round vessel full of wine (*Tr*, II, 340-2). Here we can view the wine as the matter that is 'informed' by the vessel: the wine is in a round shape only because the vessel itself is round, and we know this because we can separate the wine from its container. The possibility of taking some elements of a complex phenomenon (such as the wine) as matter and some as form then depends upon being able to consider each element apart from the others. But this is precisely what it seems we *cannot* do in Kant's account of cognition — we do not have *independent* access to formal and material features of intuitions. Rather, for Kant, intuitions always come as complexes, and there is no way to determine in an a priori manner what counts as form and what is merely material.

Yet the fact that all the objects I have perceived are spatial and temporal does not allow me to claim that space and time are a priori conditions on the possibility of perception: we have no ground, Maimon claims, "to elevate the universality of this representation

³ It is somewhat surprising that the two objections Maimon raises against pure intuitions only appear in the *Versuch über die Transscendentalphilosophie*; in other places, Maimon does not so much argue against Kant as simply assert his own position about space as a form of diversity. There are, I think, at least two reasons for this: first, Maimon did not usually see himself as an enemy of Kant's critical idealism, but rather (like so many of his contemporaries) as an 'improver' of the system. Second, and more importantly, the relative lack of attention paid to pure forms of intuitions suggests that the real issue in the debate about space and time concerns the role of the *understanding* in the process of affection — or so I will argue below.

[of space and time], which is produced a posteriori through induction, to an a priori necessity" (*Tr*, II, 342).⁴ As such, Kant's strategy of abstracting from non-formal elements of intuition rests upon the unwarranted assumption that this task can *in fact* be fulfilled, and the principles about the a priority of space and time which follows from it "remain only apparent, but not necessary" (*Tr*, II, 342). The moral Maimon draws from this is that space and time must be explained not only in terms of the form, but also the *matter* of cognition, since we have no way of separating the two elements.

2. The problem of homogeneity

Unlike the methodological point about abstraction, Maimon's second criticism marks a substantive objection to Kant's claim that space is simply a form of intuition. Maimon's claims about diversity suggest another thought experiment: assume I have a representational field distinct from me that contains a completely homogeneous green (or any other color).⁵ In such a case, Maimon claims, this representation would not be spatial, even though it *is* represented as distinct from me. Here we would have an intuition that is not governed by the conditions of space, which in turn would threaten the claim that space is simply a form of intuition. The non-spatiality of a homogeneous intuition purports to show that space is not a necessary condition for the possibility of intuitions. Rather, Maimon argues, the example of the homogeneous representation points to an alternate conception of space, one that takes diversity or heterogeneity in the content of intuitions to be a necessary condition on the possibility of space. As we

⁴ It is not clear whether Maimon here actually endorses the view that the universality of space and time is the product of induction, or if this is simply a rhetorical point against Kant's strategy of abstraction. I tend to side with the latter interpretation, given that this is the only case I know of where Maimon claims that space and time are inductive concepts.

⁵ The emphasis on the need for diversity runs through Maimon's work. Perhaps its clearest statement is found in the *Wörterbuch*: "If all sensible objects were the same, we would have no concept of difference, and consequently no image of it either, or no representation of space and time" (*PhW*, III, 40). See also the *Streifereien*, where Maimon notes that "the representation of space cannot occur where we do not find differences in objects of experience" (*Strf*, IV, 287), and the discussion of the need for diversity in the *Versuch einer neuen Logik* (*Logik*, V, 195-6).

shall soon see, Maimon claims that space stands as a form of the representation of the *differences* between sensible objects. If something is represented in space and time, its content must be heterogeneous.

The force of this objection turns on the strength of the idea that in a homogeneous field, no spatial point can be distinguished from another: there is no possibility of *location* in such a scenario. Spatiality, Maimon suggests, arises only if there are determinable locations, which are manifestly lacking in the thought experiment. Only with the introduction of a diverse *content* — a dividing line, or a differently colored reference point, for example — can we speak of the spatiality of such an intuition.

Unfortunately, Maimon's objection faces several problems. First, the thought experiment seems ill-equipped to handle the distinction Kant draws between inner and outer intuition, and especially the idea that objects of inner sense are intuited but not *in* space. Second, since Kant defines an intuition as that which relates to an *object*, it is not clear that a homogeneous representation would count as an intuition, since such a representation is presumably not an object at all. Instead, Kant would most likely grant it only the status of a *sensation*, which would not be enough to prove Maimon's point. Third, and perhaps most importantly, Maimon seems to attribute to Kant the view that space is a necessary *and sufficient* condition of empirical intuition. Kant, however, only seems committed to the view that space is a necessary condition for the possibility of outer intuitions, and could readily allow that diversity also plays a role in constituting empirical intuitions.⁶

Although Maimon's objection does not really succeed against Kant, the supposed impossibility of spatially representing a homogeneous field hints at the *reasons* that motivate Maimon in formulating his own positive account of space as a form of difference. The lesson Maimon takes from his objections to Kant is found in the idea that the form of an intuition cannot be addressed

⁶ This can be seen in the Axioms of Intuition's claim that "all intuitions are extensive magnitudes" (*CpR*, B 202); the notion of a 'magnitude' seems to imply that borders, or points of reference, or other diverse content must be part of an intuition, even if these elements are imposed by the understanding's 'schematizing' procedure.

independently of its content; the matter of intuition must also impose its own a priori conditions on the possibility of representing objects. And if this is acknowledged, Maimon argues, space must be considered as a form of difference, and not as a pure intuition.

B. *Space and time as forms of diversity*

Simply taking a few snipes at Kant's account of space, however, does not alone undermine the notion of space as a form of intuition. Since Kant claims to have shown that his position is the only viable alternative in the face of its Leibnizian and Newtonian competitors, it seems that Maimon must offer an account which enjoys the same level of plausibility as Kant's position. To this end, Maimon attempts to show that space is not a form of intuition, but a form of diversity, and, as such, must be explained not in terms of a separate faculty — as Kant maintains — but rather must stand under the more general description of thought, namely unity in a manifold.

Maimon begins his treatment of space by considering different ways in which the manifold of sensibility may be unified, and what criteria govern this unification. The forms of sensibility have their ground in the “general forms of our thought overall,” which Maimon defines as “unity in a manifold” (*Tr*, II, 15-6). Unlike Kant, Maimon *begins* with a reference to the content of this manifold: if the manifold is either wholly heterogeneous or wholly homogeneous, the unification must fail, for in the former case no unity is possible, whereas in the second, no manifold is present. At the heart of any unified manifold, then, stands the requirement of ‘unifiable diversity,’ and this is a condition that depends upon the content of the manifold, and not simply its form. Space and time then are particular forms “in which the unity in a manifold of sensible objects is possible, and thereby these [sensible objects are presented] as objects of our consciousness” (*Tr*, II, 16).⁷ More specifically, space is defined as the “separateness [*Auseinandersein*] of objects,” while time is the “preceding and following of objects”

⁷ I will address the difference between sensible objects and objects of consciousness below. For now, it is sufficient to note that sensible objects can be taken to correspond roughly to sensations, although as we shall see, Maimon has a very idiosyncratic twist on the nature of sensation.

(*Tr*, II, 17). Both stand as conditions on the possibility of representing the diversity of sensible objects.⁸

This ‘unifiable’ manifold, however, can be approached in two ways. On the one hand, we can have thoughts without reference to any particular objective content; in such a case, Maimon claims, the difference between the two relata is simply subjective. The difference between red and green, for example, can be thought according to the “rule or form of difference (that the one is not the other), without thinking their relation in space or time...[the red and green] then create a merely subjective, but *not an objective* particular [*einziges*] consciousness” (*PhW*, III, 39; emphasis added). As an activity of the understanding alone, mere thought does not make reference to an external realm of objects, but rather only relates concepts to each other.

On the other hand, the difference between red and green can be *represented* (and not simply thought) in space and time, which is to say that the subjective difference is made ‘objective.’⁹ Space and time are “the particular representations, whereby every sensible cognition is related to an object, or, more precisely, [space and time] themselves constitute [*ausmachen*] the Objective in sensible cognition” (*Logik*, V, 185). To *represent* something, the conceptual differences entertained by the understanding must be placed in some determinate, objective order. Space and time then provide what Maimon calls a “schema or image” of difference.¹⁰

Such a stance allows Maimon to claim that space and time “are both concepts and intuitions, and the latter presupposes the former” (*Tr*, II, 18). Maimon’s point seems to be that as a representation

⁸ Maimon explains the difference between space and time in terms of the distinction between separation and following, and goes on to claim that space and time can be purely represented only in the absence of the other. Two objects are spatially separate only when they are represented as simultaneous (that is, as not in a temporal sequence); likewise, two objects precede and follow one another in time only when represented as in the same location (*Tr*, II, 16-7). It must be noted, however, that this talk of absence only concerns the pure notions of space and time; empirically, both are present in representation.

⁹ The use of the term ‘objective’ here is unfortunately ambiguous. For Maimon, space and time are objective in that they provide an image *of objects* which represents a real conceptual difference. They are *not* objective in the sense of being actual features of things in themselves, or of being real apart from the activity of representation.

¹⁰ See, for example, *Tr*, II, 179f.

of the difference of things *in general*, space is a concept; it is an intuition when it represents a particular “sensible object [in relation] to different sensible objects” (*Tr*, II, 18). This determinate representation, Maimon argues, is the result of the activity of the imagination, which furnishes an objective *image* [*Bild*] of the differences *thought* by the understanding. Such an image in turn provides an individual representation of a conceptual difference; it individuates what before was simply a general difference between concepts.¹¹ To represent in space the difference between red and green, for example, we must refer to *this* particular image of red and *this* particular image of green. Space here serves as a *form* of difference, for it is the means by which subjective differences are objectively represented. As such, Maimon claims, space is an “*ens imaginarium*, for it arises thus: the imagination represents as absolute that which is only in relation to something else” (*Tr*, II, 19).

Before turning to the finer points of the theory, however, it is worth noting that despite its resemblance to Leibniz’s position, Maimon’s account does not claim that space and time — nor indeed the objects that fill them — are simply unclear or confused concepts.¹² Space is not an empirical concept, nor is it *abstracted* from conceptual difference. Rather, space stands as a condition on the possibility of representing difference, as a form of the particular images provided by the imagination. In this light, Maimon can, like Kant, be viewed as advancing a transcendental explanation of space. Each maintains that space provides the form under which the representation of an individual object is made possible; the debate between them centers on what *type* of form this is.¹³

¹¹ As Atlas notes, for Maimon, “the capacity of the imagination is...an intermediate capacity between sensibility and understanding...The faculty of imagination [is] the capacity to impart figurative force, sensuous significance, or an image to the relations of the understanding, thus giving them existential and objective import” (Atlas (1964), 174).

¹² In a letter to Kant of Sept. 20, 1791, Maimon remarks that Leibniz “made matters worse with his theory of obscure representations. I admit the supreme importance of his theory for anthropology. But in a critique of the cognitive faculty, it is certainly worthless. ‘Obscure’ representations are not states of the mind (which can only be conscious) but rather of the body” (Letter 486, AA, XI, translated in Kant (1967), 177). While it might seem worrisome that Maimon himself sometimes speaks of ‘obscure’ presentations, as we shall see below, this points to a crucial distinction between presentations and representations.

¹³ In the *Streifereien*, Maimon writes that space “is, however, not a transcendental form of outer objects of intuition in general, as Kant would have it, but

C. *Space as a fiction*

In the skeletal fashion sketched above, Maimon's alternative faces two fundamental questions: (i) How exactly does the imagination provide for objective representation? and (ii) What account can Maimon offer for the source of the conceptual differences thought by the understanding, apart from a Kantian story of affection (which would seemingly commit Maimon to a discursive account of cognition)? While the second question, which will be addressed below, poses what I see as the greatest problem for Maimon's position, I want now to turn to the details of the 'objectifying' role played by the imagination, and in particular the way in which Maimon employs 'fictions' in his account of space.

The imagination, Maimon claims, is a faculty of "fictions" (*PhW*, III, 61). The notion of a fiction, however, must be understood in a typically idiosyncratic, Maimonian sense: by it is meant not just the representation of non-present (or perhaps even non-real) objects, but also the process by which we, as limited cognizers, attribute certain features or properties to objects which in themselves these objects do not possess. To take a contemporary example, when physicists speak of 'string theory,' we need not take them to be discussing real objects. Instead, 'cosmic strings' provide a useful heuristic for understanding macro-level phenomena, even if the 'strings' such a theory posits turn out to be mere fictions. More importantly, this process of 'fictionalizing' can itself be at times a *necessary* feature of the way in which we think.¹⁴ To say that space is

rather is, according to me, the transcendental form of the diversity of outer objects, and is taken as a transcendental form of outer objects in general merely through an illusion of the imagination" (*Strf*, IV, 261).

¹⁴ Maimon defines a necessary fiction as one in which the connections of the parts of a whole cannot be perceived apart from the idea of this whole; it contrasts with arbitrary fictions, in which the components of a whole can be thought independently of their connections. At least here, Maimon seems to equate 'fiction' [*Erdichtung*] with 'taking together' [*Zusammennnehmung*], so that the function of the imagination (apprehension into a single connected 'image') *fundamentally* involves fictions (*PhW*, III, 37-8). Although Maimon does not make this clear, the use of fictions seems in part to be borrowed from Hume's account of fiction, especially the claims made in the *Treatise* about the 'fiction' of the continued and distinct existence of perceptions (Hume (1978), 193f). It also should be noted that in the sense of 'taking together,' Maimon's description of fictions does not seem terribly different from Kant's account of the imagination, especially as it is presented in the 'metaphysical' and Transcendental Deductions.

a fiction then does not immediately impugn its role in our cognitive life, but rather points to the fact that the representation of objects in space is based upon the attribution of spatial properties to differences which in themselves are not spatial.¹⁵

In the *Wörterbuch*, Maimon begins his treatment of 'Fiction' by noting that

the manifold in itself (before its connection to an object) is an object of sensation. The concepts of reflection (unity, difference, etc.) whereby the manifold is connected merely in the subject, but not to an object, are objects of thought. The merely sensible combination of the manifold to a unity in the object, however, is, just as are the objects [*Objekte*] themselves which arise from this combination, an object [*Gegenstand*] of the faculty of fictions (*PhW*, III, 61).

Space and time, Maimon goes on to claim, are themselves to be understood as "products of the faculty of fictions." Because this faculty plays a mediating role between sensibility and the understanding, space and time "have something in common with the products of the understanding and the products of sensibility" (*PhW*, III, 64-5).

In order to make sense of Maimon's claim about the 'fictional' character of space, the difference Maimon sees between the understanding and sensibility must first be made clear. The understanding, Maimon claims, as a mere faculty of rules, cannot think of objects as absolutely determined, but only of objects as they relate to each other. The understanding, that is, can think "only relative determinations of the relations [of objects] in a unity of consciousness" (*PhW*, III, 65). Sensibility, on the other hand, *does* provide absolute determinations of objects, whereby they are "known and differentiated from each other; these [determinations] however, are knowable only a posteriori" (*PhW*, III, 65).

¹⁵ Maimon explicitly makes this point about space and time in the *Versuch einer neuen Logik*, where he notes that we "have no ground to hold a representation as original [*ursprünglich*], as long as we can explain its mode of origin from other representations. Now I assert, that time and space are not conditions on the possibility of empirical (sensible) objects in general...but rather are conditions on the possibility of a representation of the difference of [empirical objects]" (*Logik*, V, 195). We are led by a psychological illusion, Maimon claims, to treat what is actually a form of difference as a form of the possibility of intuitions in general. So we represent homogeneous objects in space and time only because they are delimited by contrasting objects (See *Logik*, V, 195).

Maimon's point here seems almost Lockean or Humean: sensibility issues in immediate, determinate 'impressions' of objects, but the knowledge that arises from these impressions is only particular and a posteriori. While the understanding provides the logical forms of thought — and hence allows us to think objects in general in a unity of consciousness — it does not determinately know [*erkennen*] objects. In contrast to the understanding, sensibility *does* know objects, but only a posteriori.

The difference in the way in which the understanding and sensibility each determine objects, however, has the consequence that while we can both think relations between objects in general (which is the function of the understanding) and can know determinate objects (through sensibility),

we cannot connect thought [*Denken*] and knowledge [*Erkennen*] in the same objects, that is, we cannot think determinate objects, nor determine thought objects; because we would have at hand no means by which we could see that certain logical forms — which as concepts relate to objects in general — could in their application, be related to merely determined objects (*PhW*, III, 66).

The discontinuity between the understanding and sensibility, however, is bridged, Maimon claims, by the "a priori fictional images of space and time" (*PhW*, III, 66). Through them we reach not only a clear image of the difference of things in general (namely, separateness in time and space), but also a certain concept of that in which this difference consists (for example, predicates such as 'right' and 'left,' 'preceding' and 'following,' and so on) (*PhW*, III, 66). Space and time provide the arena in which sensibility and understanding can unite; as such, Maimon goes on to suggest, space and time "are both images and forms; they are images of the understanding, and forms of sensibility; namely, a condition of the possibility of the cognition of objects — both through the logical forms a priori, as well as through a posteriori determinations — is the concept of difference" (*PhW*, III, 66).

But why does this make space a fiction? The answer lies in the merely *heuristic* role space plays in Maimon's account of cognition. The fictional character of space follows from the difference between objects of sense — which, Maimon claims, by themselves can be presented without space and time — and the representation of the *relation* amongst these objects. Spatial predicates arise only

from the synthetic activity of relating sensible objects to each other, and as such, these predicates do not play a role in the presentation of these objects to the mind. This is just to say that their attribution is not a real or constitutive property of sensible objects, which — to Maimon's mind — makes spatial predicates fictions, albeit necessary ones.

D. *The Logik's Five-fold Consideration of Space and Time*

In the *Logik*, Maimon offers five 'considerations' of space and time. This discussion, while maintaining the general tenor about space advanced above, develops in a more systematic way the connection of space to mathematics and geometry, and offers a slightly different vantage from which to view Maimon's position. Here space and time are treated as:

- (i) the universal subject matter of mathematics (*Logik*, V, 182).
- (ii) the 'objective' in empirical objects (*Logik*, V, 184).
- (iii) conditions of thought (*Logik*, V, 186).
- (iv) conditions of cognition (*Logik*, V, 189).
- (v) universal indications for the 'completion' of our empirical cognition (*Logik*, V, 190).

Several things about this list are worth noting. First, Kant would presumably be amenable to (i), (iii), and (iv), since he claims that mathematics deals with the pure forms of space and time, and that space and time must serve as conditions on the reception of cognitive data in order for there to be thoughts about, and knowledge of, the world. Second, no mention is here made of 'forms of difference,' nor of fictions. Nevertheless, the general picture seems consistent with the accounts of the *Versuch* and the *Wörterbuch*. At the heart of Maimon's theory is the mediating role space and time play between sensibility and the understanding, which is reflected especially in claims (ii)-(iv).¹⁶

¹⁶ Although this formulation of the mediating role of space and time might seem to commit Maimon to a broadly discursive explanation of cognition, as we shall see below the account Maimon gives of sensibility as determined by the genetic processes of the understanding precludes this objection.

In arguing that space and time stand at the foundation of geometry and arithmetic, Maimon generally follows Kant's position.¹⁷ But while Kant holds that the synthetic a priori character of geometry follows from the pure *intuition* of space, for Maimon the *formal* nature of space suffices to yield geometric necessity. In mathematics, Maimon claims, space and time are *given* a priori to the faculty of cognition; the objects of mathematics are "nothing but space and time in all their possible modifications" (*Logik*, V, 184). Mathematics, that is, relates to an object given a priori, or rather "itself determines these objects a priori" (*Logik*, V, 183). The objects of mathematics and geometry are then directly created or determined according to the understanding's a priori rules of production.¹⁸ For Maimon, as for Kant, the ground of the a priori and necessity of geometry and arithmetic lies in the need for the construction and exhibition of concepts in intuition.¹⁹

However, while the objects of mathematics are *created* by thought, the empirical objects which appear in space and time are not directly given a priori to cognition; they are represented spatially and temporally by an act of the imagination. This representation, Maimon claims, serves as an indication of the *incompleteness* of our cognition. Unlike in mathematics — where the concept *completely* determines the object — the situation with regard to empirical objects is much different. Objects given in experience are never wholly determined by concepts, because "experience can never be assured of the completeness of the marks [*Merkmale*] corresponding to the objects" (*Logik*, V, 192). Where thought does not directly produce the object, there can never be complete knowledge.

Space and time, Maimon goes on to claim, serve as 'negative criteria' of this incompleteness (*Logik*, V, 192). Although we never have complete determination, we do get *nearer* to the complete

¹⁷ For extended accounts of Kant's philosophy of mathematics, see Michael Friedman (1992), and Lisa Shabel (1998).

¹⁸ This echoes Kant's claim in the Discipline of Pure Reason that "mathematical knowledge is the knowledge gained by reason from the construction of concepts. To construct a concept means to exhibit a priori the intuition which corresponds to the concept" (*CpR*, A 713/B 741).

¹⁹ One difficulty with this view arises from Maimon's claim that all mathematical — and indeed, all real — knowledge is at heart analytic, and can be ordered in an analytic whole according to the principle of determinability. This issue, however, need not be of concern here, although it does play an important part in assessing Maimon's skeptical challenge to the Analogies of Experience.

concept of an object. The fact that we represent objects in space and time points to the fact that something *remains to be* determined — spatial or temporal diversities, that is, must have their ground in some conceptual differences. The representations of space and time provide indications that “the concepts of experience, and consequently also the determined relations of objects of experience, are incomplete” (*Logik*, V, 192).

E. *Intuitions and Incongruent Counterparts*

Even though Maimon claims to treat space as a form, and not as a real entity or as an abstracted concept, his position still retains more than a tinge of Leibnizian rationalism. As such, it seems that much of what Kant criticizes in Leibniz’s account of space will also find a vulnerable target in Maimon’s story. In particular, both the intuition arguments of the Aesthetic and the difficulties with incongruent counterparts seem especially pressing.

1. The intuition arguments of the Aesthetic
 Kant’s argument in the Aesthetic turns on the difference between intuitions and concepts. Whereas an intuition is a particular representation of an object, a concept stands as a rule for the recognition of types of objects — a concept picks out marks or characteristics common to several intuitions. Concepts, moreover, are constructed representations — they serve to group previously given data under a rule, but they cannot precede this content. As Allison notes, “the marks or partial concepts out of which a general concept is composed...are all logically prior to the whole. A general concept is thus a collection of marks.”²⁰ To think of space in general as a concept would then require that it be constructed from previously given marks, which in this case would have to be parts of space.

But according to Kant, the nature of our representation of space belies this conceptual story. Parts of space are not conjoined by the mind in order to form a more general concept; rather, these parts “can be thought only as in [space]” (*CpR*, A 25/B 39). The parts of space that would putatively constitute the marks

²⁰ Allison (1983), 91.

under the general concept of space instead presuppose the entirety of space, which consequently cannot be viewed as a concept formed by previously given marks. Instead, space is a single whole, which as such can only be represented as an intuition. Because the representation of the totality of space must precede the determination of particular spaces, it follows, Kant argues, that the representation of space must be an intuition, and not a concept.²¹

The argument against a conceptual account of space is refined in the second intuition argument, where Kant seems to have as a target the Leibnizian doctrine of the complete concept of the world. Here Kant begins with the claim that space is an infinite magnitude (in the sense that every particular region of space is bounded by more space).²² As the first intuition argument shows, however, space is also a unique and unified representation — parts of space do not precede the totality of space. But precisely the uniqueness and infinity of space preclude it from being a concept, Kant claims, because such a view would involve the absurdity of a concept with an infinite *intension*. Since, for Kant, a concept is a set of marks that provide a rule for subsumption, an infinite intension (just these marks) could never be grasped by a finite mind: we would have a rule that could never be applied. This contrasts with the nature of an intuition, which for Kant is a single, unified representation, but which *can* involve an infinite number of parts. The important point is that these parts do not precede, or compose, an intuition, but rather are represented as *in* the unique intuition. And, as Kant claims, since space is just such a unified, unique representation, it must be an intuition, and not a concept (*CpR*, A 25/B 40).

²¹ For Kant, a concept involves both an intension and an extension — the latter is the representations ordered under it; the former is the rules or sub-concepts *within* a concept which serve as component parts. So, for example, the concept of 'animal' has 'zebra' under its extension, while the concept of 'zebra' has 'animal' in its *intension* (since a 'zebra' is an 'animal that is striped, equine,' and so on). In contrast to this structure, intuitions for Kant are *singular* representations, which have neither intension or extension, although they do have parts (so that the intuition of a glass of beer, while a single unified image, contains the 'component parts' of the rim of the glass, the foam of the beer, and so on).

²² As Allison notes, the type of 'infinity' used in the Aesthetic involves a sense of 'limitlessness of progression in intuition,' as opposed to mere innumerability (Allison (1983), 93).

Kant's arguments cut directly against a view that sees space and time as merely conceptual representations. Against this position, Maimon *agrees* with Kant on the formal nature of space and time, as conditions on the possibility of representing particular objects, and he endorses Kant's arguments against the 'dogmatists' (*Strf*, IV, 283), but he draws a different moral. The fundamental incompleteness of our knowledge ought to make us *skeptical* about the entire enterprise of securing the foundations of empirical knowledge; the lessons of *rationalism* on a transcendental level (namely the notion of a concept) bear out not realism but rather *skepticism* on an empirical level. The representation of an infinite, single space apart from the objects that fill it is, Maimon claims, simply an illusion of the imagination that "consists in nothing more than the elevation of the possible to the real" (*Strf*, IV, 288). The imagination, that is, makes into a 'fictional object' what can never in fact be an object of experience. As such, Maimon is able to account for the infinity and singularity of space and time, while denying that they are forms of intuition.²³

A related response is offered to Kant's argument concerning the infinity of space. Here Maimon claims that

the extent [*Umfang*] of space can never be greater than the extent of things which fill it, and since in intuition these [things] can never be anything except finite, so also can space never be represented except as finite. The representation of the infinity of space is therefore transcendent, and has no objective reality. I agree then with Kant that space, as an intuition considered in itself (not however, as an image of difference) has merely subjective reality.... This subjective reality, however, must have an objective ground, which, because it is objective, must be thought by all thinking beings in the same manner (*Tr*, II, 182).

Maimon's parenthetical qualification is important here, for it indicates what he sees as lacking in Kant's account. The treatment of space as a form of intuition, Maimon argues, mistakenly attempts

²³ A similar point is made in a section of the *Versuch über Transscendentalphilosophie* entitled 'A Short Overview,' where Maimon addresses Kant's claim that space is not a discursive concept of the relations of things in general. Maimon begins by agreeing with Kant insofar as this claim applies to "space as it appears to us, but not in view of that which it represents (the difference of sensible objects in general [*überhaupt*])" (*Tr*, II, 181). The general representation of space is "abstracted from particular differences, in that things are different in different manners" (*Tr*, II, 181).

to capture space in abstraction from the relations of objects in it. The claims in the Aesthetic about the intuitive nature of space are justified, that is, only because Kant treats space as separate from its content. But for Maimon, this cannot be the end of the story: space is intuitive only as it *appears* to us, yet this appearance must have its *ground* in the notion of the conceptual — although to us unknown — difference among the objects represented in space and time. As an intuition, then, space must presuppose the conceptual differences for which the imagination provides spatial images. As such, Kant reaches his intuition arguments only because he fails to acknowledge the objective ground that must gird the subjective forms of intuition. For Maimon, the representation of space and time must be explained not simply in terms of a separate faculty of receptivity. Rather, the representation — if it is to play a role in cognition — must be a feature of *thought in general*, which provides a means of spatially and temporally representing the differences that stand between objects.

2. The problem of incongruent counterparts

A further argument against Leibniz, which is developed in detail in the *Prolegomena*, deals with the notion of incongruent counterparts. The example is of a piece with the intuition arguments of the Aesthetic, for it is designed to demonstrate the paradoxical conclusions that follow from Leibniz's relational account of space; this, in turn, shows that space is not a concept but an intuition. Mere conceptual determination alone is insufficient to account for the representation of particular objects.

The argument in the *Prolegomena* about counterparts begins with the example of two spherical triangles, which have identical internal properties (their corresponding sides and angles are congruent, and so on), but are placed on opposite hemispheres of the sphere. Given the different curvature of the hemispheres, the two triangles can never be made to occupy the same space, no matter how much manipulation one performs. This demonstrates, Kant claims, that the difference between the two triangles cannot be shown "to be internal but only manifests itself by external relations in space."²⁴

²⁴ Kant (1950), 30 (AA, IV, 286).

Although this example poses a paradox for the Leibnizian explanation of space — for it purports to show that a mere description or concept of an object's internal properties cannot suffice to individuate — it is not clear that Maimon's account of space is damaged by it. Maimon acknowledges that space is a form of difference, and that geometry is the study of the a priori determinations of space. Here we must remember that for Maimon, as for Kant, the objects of mathematics are constructed in order to exhibit a certain concept. The incongruency, that is, depends upon how we construct the triangles — and this constructed nature seems to allow Maimon the same answer as Kant's to the paradox of the incongruent counterparts.

The issue becomes more difficult, however, with regard to empirical incongruencies, since Maimon cannot appeal (at least directly) to the fact of construction. In his argument, Kant proposes the example of a pair of gloves, which, although they may be identical in their internal properties, cannot both occupy the same space (assuming we cannot turn one inside out). Non-reducible spatial predicates such as 'left' and 'right,' Kant claims, point to the fact that the objects to which they apply must be understood as appearances, and not things in themselves — spatiality is then a primitive feature of how things appear to us, and not a relation drawn from, or dependent upon, internal conceptual relations. Incongruent counterparts, that is, show that space and time are forms of intuition, and not forms of difference.

In the *Logik*, Maimon confronts the issue of empirical counterparts.²⁵ He begins with the claim that due to our limited faculty of cognition, we never have completely determined empirical objects: we can come nearer to a complete determination, but never can reach it. This limitation is reflected in the representation of objects in space and time, which serve as indications — or, as Maimon calls them 'negative criteria' — for the incompleteness of our cognitions. If we assume two separate objects, A and B, which are known to be distinct objects, we can account for this distinction in two ways. Either we can compare their inner characteristics,

²⁵ Also important are the claims in the *Wörterbuch* that space and time, in mediating between the understanding and sensibility, provide the particular determinations of difference, for example 'right,' 'left,' 'before,' 'after,' and so on (*PhW*, III, 42).

and note a conceptual difference, or they can be represented at distinct spatio-temporal locations, which is to say that they have different 'outer' relations. These outer relations, however, must, according to the principle of sufficient reason, be determined by inner characteristics, whether or not we are able to know how this is done. So if, as in Kant's thought experiment, we find two empirical objects which differ only in spatio-temporal location, this shows only that we have an incomplete cognition of each of the object's inner characteristics, and not that space and time must be intuitions. Incongruent counterparts then "lead us to the search for the missing marks contained in the concepts, whereby the difference in outer relations can be explained" (*Logik*, V, 193). Again, the issue centers on the *grounds* that can be provided in order to account for spatial distinctness. Against Kant, Maimon argues that different spatial locations point only to the incompleteness of our knowledge — were we able consciously to construct our empirical intuitions, the problem of counterparts would disappear.

Despite these differences, it might seem that in fact Kant and Maimon do not differ in any radical sense about the nature of space and time, for while Kant claims that space and time are forms of intuition, and Maimon holds that they are forms of diversity, each recognizes the essentially formal nature of space and time.²⁶ Such a view, however, would fail to appreciate Maimon's deeply rationalistic commitments, and especially his suspicions about the role that givenness plays in Kant's system. The response to the problems presented by the intuition arguments and incongruent counterparts helps to reveal this thread in Maimon's

²⁶ The similarities between Kant's and Maimon's position have been noted by Wayne Waxman, who suggests that "Maimon was mistaken, in my view, in believing himself in disagreement with Kant [about space and time being forms of diversity]" (Waxman (1991), 16n). This comes as no surprise, since on Waxman's interpretation, Kant himself views space and time as *entia imaginaria*. In a similar vein, Beatrice Longuenesse's suggestion in *Kant and the Capacity to Judge* that space and time arise from the 'figurative synthesis' that the understanding provides to receptivity also would seem to draw Kant's and Maimon's positions even closer together. (See especially Chapter 8 of Longuenesse (1998)). I suspect, however, that both of these views might be at odds with Kant's explicit commitment to the claim that space and time are forms of the faculty of intuition — which is just to say that interpretations such as Waxman's and Longuenesse's might run afoul of the discursivity thesis.

thought, for his claims about the incompleteness of thought rest upon the idea that a merely given content could never accord with the demands of reason. Instead, Maimon attempts to provide an account of content that does not appeal to mere givenness — and hence to something like Kant's cognitive dualism — but rather to an 'immanent' explanation of content: this is Maimon's theory of the 'Differentials of Perception.'

II. *Maimon's Theory of Differentials*

As we have seen, Maimon's theory hinges on the 'fictional' role played by space and time in connecting sensibility and the understanding. The 'objectifying function' of the imagination proceeds by the fictional presentation of images of difference of sensible objects. Yet to this point nothing has been said about the crucial distinction between objects of intuition (namely objects we represent in relation to each other in space and time) and the so-called objects of sensibility. At first glance, such a distinction might seem to resemble closely Kant's division between sensation and intuition: while sensation only provides the material of cognition, it must be structured in a certain way in order to be an object of thought. Contrary to this initial impression, however, the issue of the nature of sensation is in fact where I think Maimon's break from Kant becomes *most* pronounced.

While Kant maintains that the data of sensibility are given to the mind through affection by objects, Maimon rejects this model in favor of what he calls the 'differentials of perception.'²⁷ Unfortunately, Maimon's own discussions of this extremely obscure doctrine often skirt around key issues rather than address them directly. Despite these meager resources, I think that a reconstructed version of Maimon's theory of differentials offers an interesting, and — if approached sympathetically — even compelling account of the matter of cognition. At the heart of Maimon's position lies the idea that a dualistic or heterogeneous model of cognition, one

²⁷ The differentials of perception are most prominent in the *Versuch über Transscendentalphilosophie* of 1790, yet by the *Versuch einer neuen Logik* of 1794 have receded considerably. Although the later works do not emphasize the differentials, however, I do not think the story of the *Tr* is in any way incompatible with the later accounts.

in which separate faculties interact, is fundamentally untenable; the theory of differentials is designed to provide an alternative model which, while recognizing the need for a given content of thought, nevertheless traces this passive 'given' back to an active or spontaneous function of thought itself.²⁸

A. *The difference between presentation and representation*

In a lengthy footnote in the *Versuch über die Transscendentalphilosophie*, Maimon distinguishes between a representation [*Vorstellung*] and a presentation [*Darstellung*]. A representation "is the reproduction of a part of a synthesis in relation to this synthesis," by which he means that a representation arises only from the act of unifying and comparing parts of a synthesis. A representation, according to Maimon, is a relation governed by synthesis. Prior to this synthesis, however, the consciousness of the parts of the synthesis is "not a representation, but rather a presentation, because it relates to nothing outside of itself" (*Tr*, II, 349). The component parts of a representation — what we can think of as the manifold — are simply *presented* to consciousness; they are *represented* only when unified in a synthesis.²⁹

From this, Maimon draws an interesting conclusion:

The complete consciousness of all parts of synthesis and consequently also [the complete consciousness] of the synthesis itself, is not a representation, but rather a presentation of the (understanding's) thing itself. It is, however, to be noted that both the

²⁸ Such a position (removed from all its Maimonian trappings) has recently been advanced by John McDowell in *Mind & World*, where he argues that spontaneity must be taken to be operative in receptivity (McDowell (1994)).

²⁹ Maimon makes a similar claim about the difference between presentation and representation in his "Letters from Philaletes to Aenesidemus." An original sensible perception "represents nothing apart from itself, which is to say that in fact, it represents nothing. If we therefore relate every sensible perception to something (apart from consciousness) as a representation (as in fact it cannot be doubted that this occurs), this happens through an illusion of the imagination, which through its habit of relating its reproductions to objects, or to their original perceptions, finally relates even these original perceptions to a something (outside of consciousness)" (*Logik*, V, 377-8). The mistaken ascription of the original perception — or what we might call the presentation of sensation — to something outside of consciousness then stems not from the nature of sensation (as affection) but from an illusion of the imagination, which 'subreptively' refers not only the representation to an object, but the *presentation* as well.

primitive consciousness of a component (of a synthesis) not related to something, as well as the consciousness of the complete synthesis are mere ideas, that is, they are the two limiting concepts [*Gränzbegriffe*] of a synthesis, in that [by the former] no consciousness is possible without synthesis, while the consciousness of the complete synthesis grasps the infinite in itself, and consequently is impossible for a limited faculty of cognition (*Tr*, II, 349).

Our finite cognitive faculty operates between these two limiting poles: on the one hand we never reach a primitive presentation, but neither can we have a complete synthesis. Our cognition of things, Maimon notes, “begins in the middle, and still ends in the middle” (*Tr*, II, 350).

It is important to note here the close connection of representation to *limitation*: we must represent objects — that is, synthesize a manifold — only because we do not have complete consciousness. Representations, as opposed to presentations, arise as a result of an activity of comparison and relation, which for Maimon implies a certain incompleteness in our cognition: the activity of representation points to the fact that our cognition still does not have a complete synthesis.³⁰

But while we cannot have complete syntheses, neither can we ever encounter the bare components of a synthesis. This again follows from the ‘middle ground’ which we, as limited cognizers, occupy. Since our cognition involves not only passivity but spontaneity as well, we can never encounter in cognition a purely passive presentation. To cognize is to unify, which for us must involve the activity of relation: a simple, isolated part of a synthesis is a mere idea, which must be assumed as a necessary condition on the possibility of synthesis (*something* must be synthesized) but which cannot be met in experience. Representation cannot itself expose the bare *presentations* which constitute its content or data — the

³⁰ Maimon’s use of complete consciousness seems to parallel Kant’s notion of an intuitive intellect, especially as it is presented in §76 of the *Critique of Judgment*. There Kant describes an intuitive understanding which “would have no objects except actual ones,” (Kant (1987), 284) and he goes on to claim that for such an understanding there would be no distinction between possible and actual things. In a sense, I think, this stands as an apt description of what Maimon means by a complete consciousness, in which everything is necessarily present to the infinite intellect — the fact that for us there is a distinction between possibility and actuality then points to or indicates our finitude.

claim that representation must be given some data then rests upon an *idea* of what representation must involve, rather than upon an empirical basis.

Maimon's insight is that the account of representation need not simply appeal to a *bare given* as the source of its content. For Maimon,

sensation is a modification of the faculty of cognition, that really occurs in it merely through passivity [*Leiden*] (without spontaneity); this [sensation], however, is a mere idea to which we come ever nearer through a diminution [*Verminderung*] of consciousness (which, however, we can never reach, because the absence of all consciousness=0, and consequently cannot be a modification of the faculty of cognition) (*Tr*, II, 168).

On a transcendental level, sensation is for Maimon — unlike for Kant — not attributed to affection by an object, but is simply that which is passive in cognition. This notion of passivity is central to Maimon's position, for he claims that, given our cognitive situation, we cannot say more about the *source* of the matter of thought other than point to its passivity.³¹ The 'pure given' is then for Maimon a mere *idea* of passivity, which can never be met in experience.

At this point, however, it might seem that by acknowledging a place for passivity at all, Maimon has given away the game to Kant. To say that the mind is passive (even if in part) suggests that there must be something that *acts* upon, or is received by the mind — and this would then lead quickly to a role for something that seems uncomfortably close to a Kantian intuition. But this need not be the case. As Maimon claims, passivity is not 'referential' in the sense required by the objection; the step from passivity to *affection* is not warranted. In the *Versuch*, Maimon offers an analogy with a mirror to make this point:

The representations of objects of intuition in space and time are, so to speak, the images which, through the transcendental subject of all representations (the pure I, thought through its pure a priori

³¹ On this score, Maimon notes that in "the reception of a particular sensible representation...the faculty stands as merely passive [*verhält sich dieses Vermögen blos leidend*]. If I say: I am conscious of something, I do not understand by this something that is outside of consciousness, for this would be contradictory; rather [I understand] merely the determined manner of consciousness, that is, the activity itself" (*Tr*, II, 29-30).

forms), are produced in a mirror (the empirical I); they appear, however, as if they came from something behind the mirror (from objects, which are distinct from us). The empirical (material) [element] of intuition is actually given by something apart from us (that is, distinct from us). One must, however, in the expression 'apart from us' not make the error of treating this 'something' as if it were in a spatial relation to us, because space itself is only a form in us. Rather, 'apart from us' means only something in whose representation we are conscious of no spontaneity, that is (in view of our consciousness) a mere passivity, but no activity (*Tr*, II, 202-3).

Here, I think, we see a hint of Maimon's strategy for explaining the content of intuition. Passivity is not connected to affection, but rather to the *unconscious* products of the pure I; these products are in turn presented to empirical consciousness, which does not act in receiving them.³² The explanation of receptivity, in other words, will remain *immanent* to consciousness, even though the illusion of the 'mirror of the empirical self' might suggest that there is affection by something apart from us. For Maimon, there *is* affection — but the task is to show that this can occur without appeal to affecting objects. Far from giving the game away to Kant, Maimon's account of passivity and the differentials of experience in fact begins the debate.³³

³² Against this point, Engstler claims that Maimon is in fact offering a decidedly Leibnizian or Spinozistic account of affection: "Maimon in no way advocates the view that *our* understanding 'produces' the empirical. Rather, he assumes by appeal to Spinoza and Leibniz, that the originator of the world of appearances is an *infinite* understanding, whose ideas form the elements of our appearances" (Engstler (1990), 24). The role of the infinite intellect, however, seems for Maimon to be *regulative* and not constitutive. In the *Versuch über die Transscendentalphilosophie*, for example, Maimon raises the notion of the infinite intellect by claiming that "we assume (at least as an *idea*) an infinite understanding..." (*Tr*, II, 64; emphasis added). The role of God as an idea is also addressed in the *Kritische Untersuchungen*, where Maimon notes that in order to solve the conflict arising from our limited faculty of cognition we "are led to the idea of an infinite faculty of cognition, as the last member in our always continuing cognition, and that stands as its completion" (*KrU*, VII, 248).

³³ On this point, Engstler argues that Maimon does not "offer a critique of Kant's doctrine of affection; he simply interprets it" (Engstler (1990), 57-8). In a sense this seems right — Maimon's story is an attempt to give a charitable reading of givenness to Kant. But as I think will become clear, even if we take Maimon to be simply interpreting Kant's doctrine, a great deal ends up being changed in the process.

B. *The 'calculus' of sensation*

In mathematics, Maimon claims we can consider infinitely small quantities in two ways. On the one hand, we can speak of quantities asymptotically approaching some undetermined value: the angle formed by two parallel lines, for example, can be taken to be infinitely small, since we can approach it through smaller and smaller angles. Here, however, we could never in principle reach the determination of the angle — it remains undefined. On the other hand, we *can* speak of an undetermined — but in principle *determinable* — relation, as in differential calculus, where the slope of a curve can be determined at a particular point by considering ever-smaller changes in the x- and y-values. While the changes in x and y are — considered absolutely — infinitely small, the *relation* between x and y is still itself determinable. The first type of infinitesimal Maimon calls 'symbolic,' the second 'real.' And, Maimon claims, the real infinitesimal can play a role not only in mathematics, but in *philosophical* analyses as well.

The key point here rests in the difference between the way of thinking about the relation of x and y, and the way this relation can be treated. While we cannot represent the changes in the absolute values of x and y (because they are infinitely small), the line determined by them *can* be represented in a coordinate system. The determinable differentials then stand as the "manner of origin" [*Entstehungsart*] of the line. By this, Maimon means that variations in differentials produce different lines: the represented shape of a line depends then upon the determinable relations between the infinitely small changes in its x and y values.

The claim that the differentials are *Entstehungsarten*, however, must be understood in a precise sense. The suggestion is not that we begin with bare differentials, and from them construct a line. Rather, the idea is that the line can be represented (as a mathematical entity) only because it can be analyzed in terms of its differentials. Moreover, the differentials can be taken as *constitutive* precisely because they are not reached by a process of specifying ever smaller changes in x and y; that is, they are not empirically discoverable features of a line. Rather, they stand as necessary conditions on the representation of the line, even though the values that determine them cannot be represented.

A similar method, Maimon claims, can be applied in the realm of philosophy, and in particular to the issue of the data of sensible representations. Consciousness, Maimon holds, requires synthesis, and synthesis in turn requires a manifold that must be unified. In order for us to be conscious of a sensation, the sensation itself must be thought of as composed of a unified manifold, even though the manifold must be unified *pre-* or *sub-*consciously. For sensation to be present in consciousness, we cannot posit it as merely given, but must think of it as a unified composite. It is simply that which arrives passively (or sub-consciously) unified in cognition.

Maimon characterizes this process of composition as follows:

Just as, for example, in an accelerated motion the preceding speed does not vanish, but rather combines with the following to form a still greater speed, so also the first sensible representation does not disappear, but rather combines with those that follow it, until the degree [*Grad*] is reached which is necessary [*nöthig*] for consciousness. This [consciousness] appears not through a comparison of these sensible representations, nor through an insight into their unity (that is, we are, in this [process], conscious of no comparison, although it must obscurely occur in us, because the comparison is a condition on the unity of a manifold, or a synthesis in general, whereby an intuition is first possible) as it would appear through the understanding, if it had already brought different objects to consciousness (for the imagination compares nothing), but rather happens according to the general Newtonian laws of nature, namely that no effect can be destroyed without an opposing effect. Finally, the understanding arrives, whose role is to relate different sensible objects already given (intuitions) to each other through pure a priori concepts, or to make them [the sensible objects] into real objects through pure concepts of the understanding (*Tr*, II, 30-1).

The view can then be summarized in the claim that “sensibility provides the differentials to a determined consciousness; the imagination produces from these finite (determinate) objects of intuition; the understanding produces from the relations of these different differentials, which are its objects, the relation from which arise sensible objects” (*Tr*, II, 32). So although we never encounter differentials as objects of experience, we must think of objects as composed of — or, analyzable in terms of — differentials of perception. And although this might suggest something closely analogous to the Kantian notion of an ‘affecting object,’ as we shall soon see any such similarity is only superficial, for Maimon traces affection not to an object but to the understanding itself.

C. *The genetic role of the understanding in thought*

As an explanation of the nature of sensation, Maimon's account does not seem to diverge in significant details from Kant's position. The differences begin to emerge, however, when we consider a further, more controversial, aspect of Maimon's theory — the claim that the differentials of perception are to be understood as, in some sense, the products of the understanding itself.

In contrast to Kant, Maimon argues that the true objects of the understanding are not intuitions, but rather the differentials of perception themselves. Differentials, Maimon argues, are the "so-called noumena," which stand as "ideas of reason [*Vernunftideen*], [and] serve as principles for the explanation of the generation [*Entstehung*] of objects, according to certain rules of the understanding" (*Tr*, II, 32).³⁴ The differences of phenomenal objects of sense can then be traced to the underlying relations of differentials, which serve as rules of production for empirical intuitions.³⁵

Here we must remember Maimon's objection to Kant's cognitive dualism in order to appreciate the productive role played by the understanding. If the understanding is a faculty of rules of thought, and if thinking is an act of unifying a manifold, it follows from this, Maimon claims, that the understanding can truly think an object only according to a rule governing the object's production. Since the business of the understanding "is to produce a unity in a manifold, it can think no object, except where it is given the rule or manner of its generation" (*Tr*, II, 33). As a result, the "particular rule of production of an object, or the manner of its

³⁴ Maimon's claims about noumena being ideas of reason almost certainly influenced (among others) the Neo-Kantians, especially with the notion that things in themselves are not transcendent objects but limiting cases of complete cognition. Bergman devotes a chapter to the relation between Maimon and Hermann Cohen (Bergman (1967), Ch. XIV); Atlas notes that against the 'realist' view of things in themselves, an "opposing school of thought originates with Maimon, and continues with Fichte and the Neo-Kantian school of Marburg (Hermann Cohen, Paul Natorp and others)" (Atlas (1964), 15).

³⁵ On this point, Cassirer notes a certain ambiguity about the provenance of differentials, which at times Maimon describes as provided by sensibility, and at others as rules of the understanding. Although this betrays a certain carelessness, the problem can be resolved (as Cassirer suggests) by noting that sensibility is not a distinct faculty from understanding, but is rather a different way of considering thought in general — "the sensible manifold [is] in a rational manifold" (Cassirer (1920), 100-1).

differentials makes it a particular object, and the relations of different objects arise from the relations of their rules of production" (*Tr*, II, 33). Unlike spontaneous rules of thought (namely the categories), rules of production are successive: the understanding cannot grasp a particular object as already produced, but must rather think it "merely as arising [*entstehend*], that is, as successive [*fließend*]" according to its rules of production (*Tr*, II, 33). The understanding immediately relates not to the objects of intuitions presented to consciousness by the imagination (which provides to our finite minds an *image* of the relations of differentials), but rather to "the elements [of intuition], the ideas of reason which are the modes of origin of these intuitions" (*Tr*, II, 355). Objects of sense (as particulars) then have their ground in the rules of production of the understanding, which, Maimon claims, not only thinks of relations between objects, but also possesses the ability to determine objects.³⁶

In his attempt to overcome Kant's dualism between content and thought, Maimon rejects the idea that sensations are caused by objects external to the understanding. The possibility of thought in general, that is, depends upon the claim that thought must inform *all* aspects of cognition: more aphoristically, sensations without thought are not thinkable at all. Whereas Kant begins with the assumption that sensations are simply given to consciousness, Maimon resists this view on the grounds that it precludes the possibility of applying the rules of the understanding to these data.³⁷

³⁶ In opposition to the successive determination provided by the understanding, the faculty of intuition represents the manifold as *merely* given. However, as Maimon notes, this faculty is "rule-governed, but not comprehensible by rules [*regelmässig, aber nicht regelverständlich*]" — that is, the relation of intuitions to the understanding cannot be immediate, but must be explained in terms of the differentials of perception (*Tr*, II, 34-5). As Beiser puts the point, "we do not see our experience [namely, the given intuitive content] as produced by our understanding, then, simply because we are not conscious of its activity" (Beiser (1987), 298). What to the quotidian consciousness appears as merely given is, from the philosophical perspective, a product of the rule-governed, but not 'rule-understood' differentials of the productive understanding.

³⁷ Bergman notes on this score that "in place of the Kantian duality of the intuition and the understanding...we now have the understanding alone. The problem of the correspondence between these two factors of knowledge, mind and matter, is eliminated and a unity achieved by reasserting the Leibnizian element." Furthermore, he claims, this problem is insoluble for Kant, who must appeal to an "as-if" in order to forge the connection between matter and mind

Only if we think of the understanding as having a role in the production of the content of thought can we make sense of the way in which the understanding must think of objects according to their rules of generation.³⁸ By providing a *productive* role to the understanding, Maimon hopes to preclude an insuperable gap between forms of thought and given content.³⁹

D. *The connection to space and time*

The notion of a differential of perception — and the idea that the content of thought must be grounded in rules of the understanding — marks Maimon's fundamental break with Kant. It also allows for an explanation of *why* Maimon is compelled to treat space and time as forms of diversity, and why this account, for all its apparent similarities to Kant's position, is in fact radically different from the critical philosophy.

The crucial point centers on the role of difference in the constitution of objects of sense. For Maimon, the differentials of perception are characterized only in terms of the understanding's rules of production; these rules, however, by themselves are never objects of conscious thought. They reach consciousness — which is to say that they are unified in a manifold — only when synthesized according to the understanding's forms of thought, when they are compared with one another. Space and time, as forms of diversity, arise precisely from this need for the objective representation of the comparative, synthetic activity of thought.

— the purposiveness of the *Critique of Judgment* is then a last (and perhaps futile) attempt to do this (Bergman (1967), 65).

³⁸ It is a matter of some debate whether Maimon intends the differentials to play the part of a 'thing in itself' in cognition — a view advocated, for example, in Kuntze (1912a). However, attributing this kind of 'realism' to Maimon seems to thwart the entire motivation for introducing differentials in the first place — to avoid any appeal to 'extra-cognitive' elements of thought. I agree with Atlas that the differentials do not stand outside of cognition (as a thing in itself), but rather "are a determining factor and an integral part of our perception" (Atlas (1964), 115).

³⁹ This is a point that seems very similar to the claims McDowell makes in *Mind & World* about the role that spontaneity must play in receptivity — his reasons for attributing such a role to spontaneity are, I think, very close to Maimon's, even if McDowell does not advance anything like Maimon's theory of differentials.

Much of Maimon's argument rests on the assertion that the understanding cannot synthesize what it has not itself produced. This, of course, is a rather controversial claim, one that needs some support. After all, there seems to be no problem with syntheses performed on 'non-autogenic' products — an editor, for example, might synthesize the manuscripts of two separate authors into a single work. Here there is clearly a synthesis of a product that is not itself produced by the synthesizer. Likewise, the understanding can be taken to serve as a type of 'transcendental editor' that synthesizes independently given intuitive material according to its a priori rules. So, given this plausible suggestion, why should Maimon's criterion be granted?

This question, I believe, cuts to the heart of Maimon's position, for it exposes the deeply rationalistic — and hence rather controversial — perspective he adopts toward Kant. Unfortunately, the solution to this problem at least in part requires appeal to Maimon's Principle of Determinability, which goes beyond the scope of this essay. Nevertheless, at this point, several things can be said in defense of Maimon's position. First, the operations of the understanding cannot be scrutinized separately from the whole of experience; as such, the analogy with the editor might be importantly different, since the editorial process is a temporally distinct task from the production of the separate manuscripts. Second, I do not think that Maimon categorically denies the possibility of the understanding synthesizing what it has not produced; the point, rather, is that this process can be *guaranteed* to be legitimate only if the material that is synthesized has been produced according to the rules of the understanding. This claim reflects Maimon's larger skeptical position. At stake is the *warrant* for knowledge claims, and not simply the claims themselves — Maimon argues that by beginning with a discursive model of cognition, no *justification* can ever be provided that the syntheses of the understanding are legitimate. Only if the contents of thought are taken as the products of the understanding (constituted through the process of the differentials of experience) can the rules of synthesis be shown to be legitimately applied. Absent this 'constitutive' story, the application of the rules becomes arbitrary.⁴⁰

⁴⁰ For a discussion of this arbitrariness, see Thielke (2001).

III. *The Problem of Affection and Thought*

As noted above, treating space as a form of difference does not seem nearly as anathematic to transcendental idealism as the claim that the understanding in some sense constitutes the content of thought. After all, diversity can be accommodated by the position of the Aesthetic, but it goes completely against the discursive foundations of Kant's system to suggest that the data of thought are ideas of reason. As such, the issues surrounding the presumed 'genetic' content of cognition — and the attendant doctrine of the differentials of perception — are the true source of contention for the Kantian. Moreover, the Maimonian account of the content of cognition is so antithetical to Kant's position that it is difficult even to begin developing a Kantian response to Maimon, aside from simply claiming that the story of differentials is incoherent. Two points do, however, seem to be particularly glaring problems to Kantian eyes.⁴¹

The first centers on the notion that the understanding plays a productive role in the reception of content. For Kant, the difference between the form and content of thought stands as a hallmark of human cognition. Leaving aside his stronger claims that this difference requires two faculties, Kant seems perfectly correct in insisting on this as an 'uncontroversial' account of how we think. But the idea that the understanding produces (consciously or not) content according to rules of generation seems on its face to contradict this uncontroversial view of cognition. If the understanding actively produces content, then the distinction would clearly not hold; on the other hand, if the understanding 'passively' produces content, then either this position simply collapses back into the uncontroversial account (since 'passive production' would simply be a Pickwickian expression for 'received data'), or we would face the problem of an active understanding acting 'passively,' which again seems to run immediately afoul of the uncontroversial account.

⁴¹ In his letter to Herz, Kant writes that human reason, "is thoroughly dependent on an entirely different faculty [from the understanding] for its intuitions, or better, for the material out of which it fashions knowledge" (Letter of May 26, 1789 (Letter 362, AA, XI) in Kant (1967), 156).

The second point attacks Maimon from a different angle, by claiming that the appeal to differentials is irrelevant to an account of cognition. The idea here is that the objects that affect us are not unknown things in themselves, but just everyday, empirical natural objects. On this view, after mistakenly assuming that Kant's theory of affection involves appeal to things in themselves, Maimon responds by elevating what we might take as a physiological or psychological fact about perception into a transcendental claim about cognition. Differentials, that is, might serve as an alternative to noumenal affection, but this type of affection is *not* what Kant means when he says in the Aesthetic that sensibility is the capacity "for receiving representations through the mode in which we are affected by objects" (*CpR*, A 19/B 33). *This* affection is simply the way everyday objects contribute to the cognitive process.

These two objections offer substantial challenges to Maimon's position, but neither, I think, fully appreciates the subtlety of the theory of differentials. Both claims, I want to argue, wrongly impute to Maimon a causal account of affection, when in fact the theory is precisely designed to avoid having to speak of affection in terms of the causal relations of objects to subjects. Three inter-related points can be mustered as support for this argument.

First, although the Kantian can certainly claim that the notion of affection presented in the Aesthetic is not of the noumenal variety, the language of 'representation' in the passage from A 19/B 33 betrays what Maimon sees as a source of great confusion and error. In speaking of sensibility as the affection of the subject by an object, Maimon claims, Kant is *already* smuggling in a referential role to sensation. But this is exactly what sensation does *not* do — a sensation, for Maimon, is simply a state of the subject. It does not make — nor *can* it make — reference to objects; it is a presentation, and not a *representation*. Objectivity comes only with synthesis; reference to an object arises only as a result of the activity of the imagination and understanding. Sensibility is simply what is given to the subject, but this givenness does not imply that there is a causal affection by objects, be they empirical or noumenal.⁴²

⁴² On this point, see Engstler (1990), 57f., where he argues that Maimon is attempting to reinterpret Kant's doctrine of affection so as to avoid the need for noumenal affection.

Second, the fact that sensibility is ‘given’ to the subject does not mean that we must seek out an external source of this content. To do so would again lead back into the trap of thinking that sensible content must be caused by an object apart from us. Instead, Maimon claims, sensibility can only be explained in contrast to the *activity* of synthesis performed by the understanding. The content of sensibility is simply that which is passive in cognition — namely, that upon which the understanding operates. The expression that content is given from ‘outside of us,’ Maimon writes, means only “something in a representation of which we are conscious of no spontaneity, that is, (in view of our consciousness) a mere passivity without activity.” And, he continues, the word ‘given’ signifies not “something in us that has its cause outside of us...rather, [the given] means merely a representation, whose manner of origin in us is unknown to us” (*Tr*, II, 203). Maimon’s point here seems to be based simply on the notion of a warranted conclusion: absent a causal connection between an object and a sensation, we have no right (at least on the transcendental level) to think that the origin of this sensation lies outside of us. Sensations are only passively given *in* consciousness, but this does not warrant the step to an external cause of these sensations.

The rejection of any ‘objective’ account of affection leads to the third, and perhaps most important point. This concerns the role played by the productive understanding. In spelling out his position, Maimon writes:

I assume (in that I cannot start from my immediate perception) that both the matter of intuition (the empirical therein) as well as its form are merely in me...I claim also that that which belongs to sensation, *if it is to be perceived*, must be ordered in relations (although I cannot immediately perceive these relations), and that space and time are the forms of these relations, in so far as I can perceive them; under the [notion of] matter, I understand no object, but rather merely the ideas, into which the perception must finally be resolved (*Tr*, II, 205; emphasis added).

The rejection of a causal account of affection here goes hand in hand with the need for a productive understanding. In order for sensation — construed simply as that which is passive in representation — to play a role in cognition, it must be taken not as a bare given, but as an *idea*, as that which (in principle) can be fully synthesized. This, however, can only occur if the content of sensation

is generated by the differentials as rules of the understanding: thought can come to content only because thought makes this content possible. In this sense, Maimon's rejection of the 'objective' story of affection leaves him with what we might call an *immanent* account of cognition: the dualism of Kant's theory is replaced by the productive differentials, which stand at the heart of the content of cognition. Space and time are then not forms of intuition but instead ways of representing to our finite minds the 'productive differences' of the understanding's rules of generation.

Cast in this light, it seems that Maimon's theory of differentials can avoid the criticisms mentioned above only by showing that the notion of givenness must be understood in a non-causal sense, as an aspect of *passivity*, and not of 'objective' affection. This, however, points beyond the issues of the Aesthetic, to the exposal of the further problems that a dualistic, discursive account of cognition purportedly faces. But, it seems, while the final judgment of Maimon's criticism of Kant cannot be reached here, the challenge he raises against discursivity is not simply thwarted by the arguments of the Aesthetic.

CAUSA MATERIALIS:
SOLOMON MAIMON, MOSES BEN MAIMON AND THE
POSSIBILITY OF PHILOSOPHICAL TRANSMISSION

YOSSEF SCHWARTZ

In an article published in 1980, Warren Zev Harvey suggests an analytical and historical description of modern Jewish confrontation with the philosophy and personality of Moses Maimonides.¹ Harvey separates the historical figure of the great teacher as model and symbol from his philosophical and theological doctrines. In so doing he discovers a profound devotion on the part of modern Jewish philosophers to the values they find in the figure of their great medieval predecessor. Above all, Maimonides offers those philosophers a Jewish form of medieval enlightenment.² On the other hand, analyzing the philosophical content of those modern Jewish writings, Harvey reaches the conclusion that those thinkers share very little of philosophy in common with Maimonides. This paradoxical attitude is understood by Harvey as one that defines modern Jewish thought in general but that is at the same time one even more typical of those thinkers who belong to German rationalist and idealist traditions. Among these he mentions Solomon Maimon, about whom he claims that "his brilliant *Transcendentalphilosophie* is a contribution to Kantian theory, not Maimonideanism."³

¹ Harvey (1980), 249-68.

² This fact is most clearly shown in the Maimonidean attributes Mendelssohn and Maimon took upon themselves or had bestowed on them by their Jewish environment. One can recall the way Solomon ben Joshua of Litauen adopted the name Maimon. But Mendelssohn too, who was apparently much less interested in such an honor, received it anyway from his contemporary Jews, who named him RAMBAMAN — Rabbi Moses ben Menachem, which is of course a direct repetition of the most popular epithet given to Moses ben Maimon in the Jewish tradition - RAMBAM.

³ Harvey (1980), 249. Samuel Hugo Bergman has similarly suggested that even Maimon's Hebrew commentary on the *Guide of the Perplexed* is no more than a pretext for Maimon to develop his own Kantian teaching. And see Bergman (1945), 484.

That is the way things look to a current leading Maimonides scholar. But one can find a different attitude in a variety of contemporary analysts, from Samuel Atlas through Samuel Hugo Bergmann and on to scholars writing in the last decade.⁴ All these researchers find strong evidence of a close philosophical relationship between Solomon Maimon and his medieval Jewish predecessor. One can quote Atlas's final statement in his 1948 essay "Solomon Maimon's Treatment of the Problem of Antinomies and its Relation to Maimonides"⁵: "It is fascinating thought to realize that, through the mediation of Maimon, Maimonides' ideals played their role in shaping the metaphysical systems of the post-Kantian period. One is overwhelmed in contemplating the devious and mysterious course of the human spirit; and one is involuntarily compelled to ask wonderingly, in paraphrase of the words of Ecclesiastes: Who knows the way of the spirit?"

On the one hand Maimon is presented as a Kantian or post-Kantian pretending to be a follower of Maimonides. On the other hand we hear about Maimonides living again in modern thought through Maimon. Is there a way to choose between those two contradictory interpretations?

In order to discuss the matter I will, in this paper, treat Harvey's claim more seriously. On the other hand, and moving somewhat beyond the realm of mere philosophical analysis, I would like to raise a question as to the nature of cultural agent and cultural influence in relation to the special role played by Maimon within the German and Jewish-German culture of his time.

To return to the basic differentiation between "ethical" and "philosophical" authority, as formulated by Harvey, there is no doubt concerning the crucial influence of Maimonides in Maimon's life on the first, the "ethical" level.⁶ Assuming that to be so, one can make the following two points:

1. Maimon was heavily influenced by Maimonides and intensively involved with the interpretation of his thought and especially of his philosophical work *The Guide of the Perplexed*.

⁴ Lachterman (1992); Schulte (1998); Hayoun (1997).

⁵ Atlas (1948), 49.

⁶ Maimon himself emphasizes the ethical influence on him of Maimonides throughout his life. See *Leben*, I, 307f.

2. Maimon can nevertheless not be regard as a “Maimonidean.” This point will be treated as an almost obvious one, since we are dealing with a thinker who escapes any categorization of tradition or influence whatsoever; he can be defined neither as a “Kantian” nor as a “Leibnizian,” nor as anything else.

Maimon’s preoccupation with the *Guide* is reflected primarily in two intensive studies, dedicated to the interpretation of this work. Both were written during the period 1791-1793, soon after publication of Maimon’s *Transzendentalphilosophie* (1790). The first, *Giv’at Hammore*, was written in Hebrew and includes a detailed study of the first part of the *Guide*. The second constitutes the chapters opening the second part of Maimon’s autobiography and was written in German.⁷

In what follows I would like to concentrate on two separate issues. I would like first to explore the nature of each of those writings, their potential audience as well as their political agenda. Second, I would like to examine the extent to which the agenda of each work shapes its philosophical argumentation and style.

A. Maimon’s Dual Cultural Project

Like his elder associate in the common project of Jewish enlightenment Moses Mendelsson,⁸ Maimon acts within a complex hermeneutic situation. As a cultural agent he weaves back and forth between two ideal cultures—German enlightenment and Jewish enlightenment. I use the term ‘ideal’ here to express the tension between *sein* and *sollen*, in the reality of a society that falls far short of fulfilling the ideal social notion of enlightenment, not only on Jewish side but also in the German.⁹ In a way, the use of

⁷ *Leben*, I, 305-454. It is important to note that the chapters the author chose to place in the central part of the book, were usually neglected by editors of the work. In most editions they were treated as an appendix and were moved to the end of the work in order not to interrupt the autobiographical narrative. In other editions, including the Schocken edition of 1935 these chapters were simply omitted!

⁸ Such analysis of the role Mendelsohn plays between German and Jewish cultures was already suggested in Levy (1972), 44-52. But it might also be seen in the description of Mendelsohn provided by Maimon himself. See also *Leben*, I, 472-490.

⁹ On the great gap between Maimon’s expectations of Berlin and the reality

this term here in itself represents an attitude toward the question of Maimon's relation to *Haskalah* and enlightenment. The notion of "ideal culture" implies a severe doubt on as to the possibility of seeing *Haskalah* as a closed and defined project, a definition that enables one to examine extent to which Maimon feats into these criteria—i.e. the extent to which he belongs to the *Haskalah*.

As a cultural *Hermes*, moving between two (ideal) cultures, Maimon necessarily uses two different languages, and the difference between the two is clearly shown in his two writings on Maimonides. The first, the commentary, *Giv'at Hammore*, written in Hebrew and published anonymously in 1791,¹⁰ forms part of a long, mostly medieval tradition of Hebrew philosophical commentaries on that work (Of which Maimon is mostly close to one of the most radical among Hebrew commentators, Moses Narboni). Surprisingly it employs a highly modern philosophical vocabulary, using, among others, Kantian and Leibnizian terminology. In this sense it is probably the first serious attempt to describe Kant's ideas (in Maimon's post-Kantian formulation of them) in the Hebrew language.¹¹

The second, which constitutes the second part of Maimon's German-language autobiography, published in 1792, is mostly a translation (or a paraphrase) of parts of the medieval Hebrew text of Maimonides' *Guide of the Perplexed* into German. It therefore introduces the *Guide* to the German reader for the first time in a modern European language.¹² Maimon adds his remarks and suggests his own interpretations throughout this selection.

It seems to me that not enough emphasis has been given to the separate political-cultural agendas represented in these two works. Maimon's Jewish agenda, as reflected in his Hebrew commentary is an apologetic of the possibility of a Jewish philosophy, directed

he found there see Hayoun (1997), 38f.

¹⁰ At the end of his foreword Maimon gives the reader a hint as to his identity, playing on the initial letters of his name, which form the word S'BI, which in Hebrew means "captivity." See *Giv'at Hammore*, 5.

¹¹ Although some Kantian ideas had been published by Isaak Euchel in *HaMehasef* as early as 1784; see Schulte (2002), 161ff.

¹² Until the nineteenth century the most modern version available to the European reader was the Latin translation of Johannes Buxtorf (Rabbi Mosis Majemonidis liber Doctor perplexorum, Basel, 1629) replacing the medieval Latin version printed by Giustinianus in Paris, 1520.

toward his Orthodox Jewish contemporaries. The incident in the *Rosenthalertor*, where Maimon's entry into Berlin during his first journey to Germany was banned, when a manuscript of his commentary to the Guide of the Perplexed was found in his belonging, can be seen as symbolic of his situation. At that rather early stage of his life, the Jewish community seemed to be his only possible gateway into German — i.e. modern European — culture, and this gate might easily be shut in his face if his personality risked offending the norms of Orthodox community leaders. Some ten years later, Maimon strove to take part in constructing the bridge that would enable his German and East European Jewish contemporaries to take that same step toward modernity, the way he understood it. This is the complex and paradoxical project of Jewish enlightenment.

In his introduction to *Giv'at Hammore*, Maimon employs to this end the kind of argumentation used by Maimonides himself to justify his own medieval project of enlightenment. The basic claim is that what is suggested constitutes less of a revolution than a renaissance, the reconstruction of a past tradition that had suffered a decline, which itself is explained in historic-materialist reasoning. To quote from the *Guide*:

Know that the many sciences devoted to establishing the truth regarding these matters that have existed in our religious community have perished because of the length of the time that has passed, because of our being dominated by the pagan nations, and because, as we have made clear, it is not permitted to divulge these matters to all people.¹³

Translating that claim into the conditions of his own time, Maimon in the introduction to his commentary praises the memory of Maimonides, who “left behind him a blessing to keep us alive in these days, after we have become with the length of this exile a disgrace to our neighbors, ridiculed and mocked by our surroundings, and the prudence of our sages has been lost.”¹⁴ Maimon then uses Maimonides' claim in the above quoted passage as well as in another well-known statement made in the *Guide* concerning the esoteric character of the work. This necessary esotericism prevents

¹³ Maimonides (1999), 175.

¹⁴ *Giv'at Hammore*, 4.

the Jewish reader from understanding the full meaning of the *Guide* and suggests the need for an up-to-date philosophical commentary. Here Maimon adopts Maimonides' hermeneutic of the Jewish sacred scripture and implements it in the writings of Maimonides himself — a habit common to many of the medieval interpreters of Maimonides.¹⁵

Another argument for the necessity of philosophical renewal is based on the development of knowledge in general and its development between the time of Maimonides and that of Maimon in particular. This is a highly familiar claim of enlightenment rhetoric; but its exact Hebrew formulation, as suggested by Maimon, is again taken from the *Guide*.

This, then, is the Jewish philosophical agenda of Maimon's Hebrew commentary: to use the ideal medieval figure in order to give new legitimacy to the preoccupation with philosophy and science among his fellow Jews, based on the principles of Maimonides.

A rather different tendency manifests itself in the other work under discussion here, the chapters dealing with Maimonides in Maimon's German-language autobiography. Obviously we are dealing here with a different sort of apologetic and with the creation of a different kind of legitimacy, raising the possibility of an intercultural, super-cultural society of philosophers, one in which non-Christians can play a true part. More specifically, this claim has to do with legitimate Jewish partnership in the German project of enlightenment. In other words, the Hebrew rhetoric strives to legitimate the Jewish preoccupation with contemporary philosophical ideas, using the model of Maimonides and his relation with the philosophy and science of his own time. The German rhetoric tries to legitimate this preoccupation with philosophy from a universal viewpoint, pointing to the ancient roots of the preoccupation with philosophy in Jewish tradition.

The difference between the two separate audiences — traditional Jewish against German non-Jewish — can be shown also from the different attitude towards Maimon's own identity. The Hebrew commentary had been firstly anonymously published, which means that under the name of Maimonides and in the cover

¹⁵ On the philosophical esoteric interpretation of the *Guide* in medieval literature see Ravitzky (1996).

of traditional commentary form the teachings of Maimon should approach a Jewish audience, who otherwise had no interest and no access to them. The German work represents an opposite tendency. It is the name of Maimon and his relatively well known reputation that shall open the gate also for his medieval predecessor, who is still unknown by the German audience.

Technically speaking, both works deal primarily with translation. However, Maimon cannot be viewed as a technical translator. Therefore, in order to appreciate the significance of the difference in political agendas, one needs to look for more crucial philosophical differences between the two texts. In the section that follows I would like to examine one such case. The close dating of the two publications precludes, in my opinion, explaining these differences in terms of some chronological development in Maimon's thought. Accordingly, and insofar as we do find the differences to be significant, we are left with only the contextual cultural explanation suggested above.

B. *Causa materialis*

All those who have written on Maimon's relation to Maimonides have paid great attention to Maimon's interpretation of *Guide I*, chapter 68, the chapter in which Maimonides describes the philosophical teaching concerning divine versus human intellect and the act of intellection. Given the centrality of the notion of infinite reason in Maimon's system, it is understandable that this discussion has attracted so much attention. In what follows I would like to ignore the question of the extent to which Maimon's notion of an infinite intellect was really shaped by Maimonides and the Jewish Maimonidean tradition.¹⁶ Taking the line of the first paragraph, I would like to examine the formulation given to the matter by Maimon in his Hebrew Text as compared with that in his German text, the two having been written so close to each other chronologically. Simultaneously, I would like to follow the linkage, suggested by Maimonides and adopted by Maimon, between this intellectual analogy and the wider question of the relation

¹⁶ See Atlas (1948), 18ff.

between God and the world, presented to the reader through the discussion of causality.

The linkage of these two topics can be traced back to Maimonides himself. Having discussed the matter of human and divine intellect in chapter 68, Maimonides then proceeds in chapter 69 to discuss the divine attributes of “first cause” and “first ground”. Refuting the theological argument of the *Kalam*, Maimonides rejects the differentiation that those theologians try to establish between “first cause” and “world maker”: “But you know that, regarding this subject, there is no difference between your saying a cause and your saying a maker.”¹⁷ Describing the Aristotelian teaching of the four kinds of causes, Maimonides summarizes that “it is for this reason that they say that He, may He be exalted, is a cause and a ground, in order to comprise these three causes — that is, the fact that God is the efficient cause of the world, its form, and its end.”¹⁸ Maimonides ends this discussion with an attack directed against those among the *Mutakallimun* who, assuming the absolute transcendence of the divine maker, actually allowed the absurd conclusion that the world might exist even without the divine permanent presence. Against such a claim, Maimonides introduces the absolute ontological dependence of the creation on the creator according to the philosophical notion of causality.¹⁹

In the fourth chapter of his autobiography, Maimon paraphrases chapters 68 and 69 of *Guide I* in one paragraph as follows:

In chapter 68, Maimonides proves with great sharpness the truth-value of the philosophical opinion that God, being a thinking Subject, his thought and the intellectually cognized object are one and the same. He explains this as follows: “Before man accepts cognition of anything, he has, concerning that thing, only potential cognition. This object of cognition, before I actually think it, also has only the capacity to become an object of cognition. But when it becomes an actual thought, there is (concerning this particular object) no longer any potential cognition, as it has turned itself into the actuality of this thought. The same is true for the potentiality of the thought-object, when it is actually thought.

¹⁷ Maimonides (1999), 167.

¹⁸ *Ibid.*

¹⁹ Such an argument is typical of Maimonides: he leads his Orthodox opponents “ad absurdum”, to the extreme position in order to reveal the non-orthodox results that might be deduced from their own reasoning.

The actual cognition is at the same time the actualized power of cognition and the actualized power of the object of thought, and all three are one. Since there is now no potentiality in God, but all that which is (possibly) cognizable is actually thought by him, it thus follows that God as a cognizing subject, his cognition and the cognized object (which can be thought by a finite intellect only in an analogous manner) are all one and the same.”

The prudent reader can easily see where the matter could lead!

Maimon goes straight on to connect this discussion to that of causality:

In the following chapter he says: “The philosophers call God “first ground” or “first cause.” But the dialecticians [Maimonide’s name for the theologians of the Kalam — the Mutakallimun. Y.S.] neglect these attributes and prefer to name God “the maker,” believing that there is a great difference between these two notions. They say: a cause as a cause cannot precede its work. Therefore if we call God the cause of the world, we must assume its similar eternity. The maker, on the other hand, can precede his production. Those dialecticians reach this fallacy because they dismiss the difference between the mere potential and reality. But the philosophers prefer to call God “cause” and not “maker,” although the two appellations are equal, as we have shown. The reason is not that they want to reveal their opinion on the eternity of the world but because the word “cause” includes all four causes: matter, form, efficient and final while “maker” includes only one sort of causation. Therefore, when the philosophers claim God to be the cause of the world they mean that he is “the maker of the world and its form and its end.”

What follows from such an argument I need also not explain at length to the learned reader.

What is it that the “learned” and prudent German reader is supposed to understand by himself? The conclusion left open by Maimon is that Maimonides, like Spinoza, turns God into a material as well as a formal immanent cause of the world.²⁰ Karl Albert suggests a definition of medieval pantheism as the teaching that claims God, as absolute being, to be the formal being of any concrete individual in the world.²¹ To present God not only as the

²⁰ On God seen by Spinoza as a material cause see Wolfson (1969), 296-330. Wolfson, analyzing prop. 16-18 of the *Ethic* and I.3 of the *Short Treaty* accepts Spinoza’s explicit claim rejecting both the finality of divine causation as well as any other teleological mechanism. For a more critical analysis see Forsyth (1972).

²¹ Albert (1976), 11: “Die Hauptform des mittelalterlichen Pantheismus, ..., scheint durch die Lehre charakterisiert zu sein, Gott sei als der Seiende schlechthin und das Sein selbst das “esse formale” des innerweltlichen Seiendes,

formal but also as the material cause of creation means necessarily that God is not only the form of forms (*forma formarum*) but also the concrete form that constitutes any concrete object in the real world. One should recall that Maimon published his book in the very midst of the *Pantheismusstreit*. This debate over the teaching of Spinoza began around the mid-eighties of the eighteenth century and continued into the nineties—the period in which Maimon published these chapters. It deeply involved Maimon's friend and patron Mendelssohn, who, especially in his philosophical discussion of the matter in his *Morgenstunden*, adopted a rather ambivalent position toward Spinoza. As we shall see, it is Mendelssohn who might be regarded as the first to point out the possible correlation between the discussion of the nature of intellect in Guide I, 68, and Spinoza's pantheism.²²

However, in order to follow the philosophical argument in which Maimon supports his common reading of Spinoza and Maimonides,²³ one may turn to Maimon's Hebrew commentary. Here Maimon cannot simply hint that Maimonides holds God to be the material cause of the world. Unlike his German contemporary, who probably found himself for the first time in his life in direct confrontation with the *Guide*, the Hebrew "learned and prudent reader" might be familiar with the text and in any case is not dependent on Maimon to gain access to its content. He might argue immediately that Maimonides never makes such a claim as the one suggested by Maimon—that God is the material cause of the world. Maimon must thus develop his own interpretation. This occasion is very important to our understanding of the exact way in which Maimon's *Koalitionssystem* functions, that is to say, how exactly Maimon as a highly genuine thinker integrates his historical sources into his own thought, and then, through his reading of his sources, also integrates them with one another. In this sense, it

d.h. das Sein einzelnen Seienden, das es in seiner Einzelhaftigkeit konstituiert."

²² That is of course only if we ignore the somewhat obscure claim of Spinoza himself in the Ethics (second part, note to proposition VII), and see Spinoza (1959), 42: "Thus also a mode of extension and the idea of that mode are one and the same thing, but expressed in two manners, which certain of the Jews seem to have perceived but confusedly, for they said that God and his intellect and the things conceived by his intellect were one and the same thing."

²³ For a discussion of the relationship between Spinoza and Maimonides on that issue see Goodman (1988). See also Schwartz (1997).

might provide us with a further contribution to the ongoing effort to locate Maimon's philosophy between pre-Kantian rationalism and post-Kantian skepticism or idealism.²⁴

The difference between the two commentaries can be shown already in the way Maimon interprets chapter 68 in *Giv'at Hammore*. Maimon begins with a Kantian description of the basic act of cognition, his aim being to explain how any knowledge of an object posits a synthetic temporal process of accumulation of apprehensions. To "know" a golden sphere, one has to combine a plurality of sensory perceptions, such as the round shape, the golden color, the weight, etc. Maimon goes on to explain that the fact that this plurality of perceptions is comprehended in some concrete temporal order reflects its extra-mental origin, i.e. the existence of an extra-mental object. The passive character of such a synthetic act of cognition is also reflected in its temporal order. To explain the temporal nature of that cognition, Maimon develops his version of Kant's description of causality. He mentions his discussion in the *Transzendentalphilosophie*, where he explains that any objective concept of an extra-mental causal relation must be regarded as the necessary consequence of an inner notion of such a possible relation. Our capacity to translate a series of apprehensions into a picture of one concrete object in a process of changing depends on a basic identity between those apprehensions that allows us to identify them as belonging to the same substrate.

On the basis of these explanations Maimon can now suggest a preliminary general understanding of the subject matter discussed by Maimonides in that chapter. The analysis of the act of cognition implies the above-mentioned causal analysis of reason as an independent substantial active agent. Such an active act of cognition

²⁴ Here one should mention especially the detailed analysis of Buzaglo (1992). Buzaglo attacks almost all traditional interpretations of Maimon because they fail to grasp Maimon's highly modern formulation of mathematical problems which therefore reformulated his thought into some sort of pre-Kantian rationalist system typical of the 17th century. Many of Buzaglo's suggestions are more than convincing; nevertheless this failure occurs mostly when the interpreter does not analyze the rhetorical formulations in their concrete philosophical setting. On doing so it becomes clear which new meanings a "traditional" claim (say one taken from Leibniz, Spinoza or Maimonides) might gain in a new speculative (post Kantian) setting. In the present paper however I am interested less in an overall perspective of Maimon's philosophical ingenuity and much more in his separate rhetorical moves and their cultural background.

necessarily implies (1) a permanent element (*substratum*); (2) a series of accidental apprehensions; and (3) a basic similarity between those accidental notions. What changes in such a process is neither the substance, i.e. the intellect, nor the accidental apprehensions, but rather the relation constituted between them at any given moment. Maimon concludes this preliminary explanation by pointing out that this temporal process is totally dependent on the atemporal nature of reason. It is the structure of reason itself that reason discovers "in the world." In that atemporal, i.e. *a priori* sense, one can argue that the object of cognition is identical with the intellect itself and with the creative spontaneous act of intellection.²⁵

Only now does Maimon begin to interpret the chapter itself, beginning with an explanation of the basic notions according to Maimonides. The three elements Maimon attributes to Maimonides are the intellect as the power of abstraction of sense perception, the actual cognition as the fulfillment of that power, and the actual object of cognition involved in that process. These elements are joined together in a human as well as divine act of cognition. Maimon goes on to point out what seems to him to be a weak point of Maimonides' description. In ascribing the active part only to the intellect, leaving to apperception the passive part of collecting data, Maimonides limits the definition of the intellect as he ignores the creativity of the process of perception itself. The synthetic capacity necessarily proceeds and explains the analytic process. The three elements of cognition should therefore be regarded as first, the potential object of cognition before its intelligibility is gained from the intellect; second, the potential act of cognition; and third the potential knower. One may criticize these remarks by employing the same argument Maimon himself raises against some post-Kantian critiques of Mendelssohn.²⁶ Maimon explains there that there is no sense in criticism based on philosophical assumptions developed at a later historical stage. If this is true of a critique of Mendelssohn presented from a Kantian perspective, then it is even truer of a modern Kantian critique of medieval thought. It is clear that rather than a relevant critique of

²⁵ See Hayoun (1997), 63.

²⁶ *Leben*, I, 490.

Maimonides, what Maimon is really expressing here is his disagreement with Kant's dualism.²⁷

Maimon ends his analysis of chapter 68 by comparing Kantian dualism with Leibniz's system, showing that Maimonides' claim can be fully grasped only within a rationalistic system such as that of Leibniz. Taken on the basis of Kant's epistemological principles, it can suggest a description only for the form of cognition, separated from the object of cognition, which itself stays beyond the realm of human cognition.²⁸ The moment of total identity, typical of the divine knowledge and shared by human cognition, can be fully grasped only within the realm of a rationalistic system.

Maimon now moves to an explanation of chapter 69, i.e. of divine causality. In his analysis of Spinoza's notion of causality, Henry Austin Wolfson suggested a new formulation for the familiar tension between divine transcendence and divine immanence, a tension one can find in almost any medieval scholastic discussion. Wolfson uses that tension as an organizatory principle of the problem of divine attributes. To the divine transcendence a series of attributes is connected—such as divine unity, simplicity, etc. Another series of attributes—divine omnipresence, omnipotence, omniscience, etc.—is connected to the divine immanence. This second group of attributes is connected to the supreme attribute of God as creator, i.e. as cause.

This tension between divine immanence and divine transcendence is well represented in Maimonides' *Guide* and builds the inner tension between the first and the second part of the book. But even in the first part of the *Guide*, dealing mostly with the theological consequences of a systematic acceptance of divine transcendence, one can point to a similar tension. After summarizing the discussion of negative attributes in the analysis of the most supreme and transcendent divine attribute, Shem Hamphorash (chapters 61-62),²⁹ Maimonides moves in chapters 68-69 to the

²⁷ See Buzaglo (1992), 193; Engstler (1990), 83: „Maimons Interpretation der Kantischen Schematismuslehre wird noch verdeutlicht durch eine Ausführung in seinem direkt im Anschluss an den ‚Versuch über die Transcendentalphilosophie‘ entstandenen Kommentar zu Maimonides' ‚Führer der Unschlüssigen‘.“

²⁸ *Giv'at Hammore*, 107.

²⁹ Maimonides develops in that place a rather complicated discussion that Maimon interprets in accordance with some cabalistic interpretation (esp. Abulafia) but also in an argumentation which is almost similar to the one suggested by

other pole. He does so through an analysis of two key notions: the analogy between divine and human intellect, and the divine attribute of causation.

As we have seen, these two discussions are closely related in Maimon's eyes, as any act of cognition involves the principle of causation. As in the autobiography, Maimon also in the Hebrew commentary explains the debate between Maimonides and the *Kallam*, noting that according to Maimonides there is no reason not to name God as cause and ground. Explaining these two notions, Maimon claims "ground" to be the formal condition of a synthesis that has no claim on its actual reality. A "cause" on the other hand is that which conditioned the actual existence of a concrete object. "That is to say that the ground is a mere logical concept, while cause is this formal concept being attributed to a particular external object."³⁰ It makes no sense, explains Maimon, to differentiate between cause and active agent (such as maker) while both are analyzed as such only after they have constituted an existential unity with their affect or passive activated agent.

Maimon has now reached the point in the text where Maimonides speaks of the three forms of divine causation. It will be recalled that in the German commentary, Maimonides' opinion is introduced as if he understands God as material cause of the universe. I suggested there that the concrete context of this claim is on the ground of Spinoza's material concept of God and of the *Pantheismusstreit*. What now follows will sharpen and justify this intuition. Here, in the parallel Hebrew discussion, Maimon is far more oblique concerning the original claim of Maimonides. Instead of making a direct claim on the materiality of God, Maimon prefers to use the freedom of the interpreter to raise his own question: "One has to wonder why the philosophers did not claim God, may he be exalted, as Matter, that is to say, as the last subject of all other things which cannot be attributed to anything outside

medieval German thinkers as Albertus Magnus und Meister Eckhart. All those interpretations point on the similarity between the Tetragrammaton as a signifier of God's special existence and the notion of existence that Maimonides develops in Chapter 63 in his interpretation of Exod. 3:14. See *Giv'at Hammore*, 94f. On the medieval scholastic interpretations of those chapters of the *Guide* see Schwartz (1996).

³⁰ *Giv'at Hammore*, 108.

itself?"³¹ Maimon suggests that such a formulation would make God the ultimate cause, while any other claim would leave us with the co-existence of primordial matter with God. To confront that difficulty Maimon chooses to translate and summarize part of Giordano Bruno's *Della causa, principio et uno*.³²

Maimon came upon this work through reading Jacobi's treatise "Über die Lehre des Spinoza, in Briefen an Herrn Moses Mendelssohn," published in the midst of the *Pantheismusstreit*. What was so important in that text for Maimon was the way Bruno uses the notion of infinite intellect and formulates it as the relation between intellect and the object of cognition in order to describe the relation of God to the world as an immanent absolute cause. Furthermore, Maimon is probably fascinated by the extreme immanent interpretation given by Bruno to that infinite intellect. The divine intellect according to Bruno constitutes the inner motion of any single intellect.³³ Similarly, Bruno gives an immanent explanation for the efficient cause. To explain his claim, Bruno uses the well-known metaphor of the relation between sailor and ship to suggest the relation of body and mind. In the rest of the quoted discussion, Bruno ponders the nature of material cause. The primordial matter is a rational construct lying behind any concrete mode of existence, which leads to such notions as that of Ibn Gabirol, seeing matter as the elementary divine substance lying beneath all the changes of particular forms. Against that notion, Bruno offers his world-spirit as primordial form. When related to such an original form the primordial matter might be taken either as universal potentiality or as a substrate. As a potentiality it cannot carry forward its actual fulfillment. But also as a substance it is far from being only a passive element or the ultimate principle of receptivity. It is formulated as being both potentiality (or receptivity) and its active fulfillment. In this way the creative process is always understood as a process of inner differentiation. That is the process described in the book of Genesis, one in which out of

³¹ Ibid., 109.

³² Which he will later in 1793 describes at length in a German essay published in the *Magazin zur Erfahrungsseelenkunde* and see Maimon, „Auszug aus Jordan Bruno von Nola. Von der Ursache, dem Prinzip und dem Einen," IV, 617-652.

³³ *Giv'at Hammore*, 110; for a recent discussion of the relation between mediaeval pantheism and Bruno's ideas see Grün (1999).

primordial unity of the elements, the spirit of God begins its creative act of discernment and differentiation. On the ground of this discussion Maimon can now sum up, claiming that:

The rule which follows these discussions is that the four causes necessary to any creation, that is to say the material, the formal, the efficient and the final, are, from the perspective of reality as a whole, one substantial thing. Matter is the absolute substrate of any corporeal and spiritual existence. At the same time it is also the form (of any existence), as it contains within itself, in a way which is above our capability to grasp, all potential forms. It is also the efficient cause, i.e. the principle which discern forms and reveals them to the exterior world and the final cause, which is the actual existence of all potential possibilities. ... And in this way it is possible to understand the argument of the teacher, blessed be his memory. The form he mentions there refers to the natural form, not to the separate intellect.³⁴

Maimon ends this discussion with an explanation of the difference between a natural and an intellectual ultimate form. To do so he uses the Kantian differentiation between *erkennen*, as the cognition of a concrete extra-mental entity, and *denken* as any act of cognition, unconditioned by any extra-mental entity. With this remark Maimon ends his detailed analysis, having proved at length what he had merely proposed in the German text. As suggested earlier, one should read his discussion here in the light of the *Pantheismusstreit*, adding two other figures to those of Maimonides and Kant: Spinoza and Mendelssohn. Maimon himself explicitly mentions them further on in his discussion of the *Guide* chapter 74. In discussing the problem of the eternity of the world Maimon use the opportunity to translate two chapters (11 and 13) of Mendelssohn's philosophical apology *Morgenstunden*, published in German a few years earlier (1785).³⁵ The first of them deals with a proof of the existence of God out of causality (impossibility of infinite regression of causes), while in the second Mendelssohn suggests a direct confrontation with Spinoza's monistic system.

After translating chapter 11 Maimon explains that the opinion expressed in this chapter equals the first two theses brought by Maimonides in the name of the Kalam's proofs for the *creatio ex*

³⁴ *Giv'at Hammore*, *ibid.*

³⁵ *Giv'at Hammore*, 158-166; Mendelssohn (1968), 392-412; a full Hebrew translation of the text by J. Herzenberg was published in Königsberg in 1845.

nihilo.³⁶ Against this Maimon raises the opinion of Spinoza, using the famous leading slogan of the *Pantheismusstreit* "All is one and the one is all" (*en kai pan*). This system is defined by Maimon as (a) one that is discerned from the vulgar opinion; (b) one that is very deep and very close to the cabalistic notion of *tzimzum*,³⁷ and (c) one that contradicts the opinion of the *creatio ex nihilo*. Maimon now translates chapter 13 of the *Morgenstunden*, in which Mendelssohn confronts Spinoza's teaching. Mendelssohn's argument is somewhat ambivalent. Jacobi formulated his well-known systematic demonization of Spinoza's teaching, claiming that Spinoza's "system" forms a kind of irrefutable deduction. Once one enters upon the journey—i.e. accept its basic assumptions—there is no way out.³⁸ To counter Jacobi's claim, Mendelssohn first tries to prove that Spinoza's system is far from being irrefutable, and to do so, he attempts to shatter the coherent monistic picture suggested by Spinoza. For doing that he quotes Wolfs' discussion, attacking Spinoza's notion of substance.³⁹ At the same time Mendelssohn tries to point out that Spinoza's teaching is not so far removed from more familiar and even orthodox assumptions. Here Mendelssohn uses, as Maimon rightly notes, the same structural similarity between the medieval Neoaristotelian theory of intellectual identity and Spinoza's monism. "The consequence of this is the being of the world in him, may he be exalted, as the being of the object of knowledge in the intellect."⁴⁰

To conclude the discussion Maimon translates Mendelssohn's refutation of Spinoza and then formulates his own well-known definition of the antinomy of creation,⁴¹ a matter best left to another discussion. Here I shall point out only the clear connection between the epistemological discussion, rooted as it is by Maimon in a radical idealist point of view, and the discussion of creation, emphasizing the spontaneity (i.e. creativity) of the divine intellect.

³⁶ *Giv'at Hammore*, 161.

³⁷ *Ibid.* Maimon repeats here the thesis of Wachter brought by Mendelssohn on the same place. On Maimon's formulation of cabalistic ideas see *Leben*, I, 127ff.; Engstler (1994), 167.

³⁸ Jacobi (1998), 20.

³⁹ Mendelssohn (1968), chap. 13; For Wolfs' Critique see Scholz (1916), XLIII-LVII.

⁴⁰ *Giv'at Hammore*, 165.

⁴¹ See Atlas (1948), 20; Bransen (1991), 91-133.

This is probably the linkage between chapters 68 and 69 made by Maimon and maybe even by Maimonides himself.

One year later, Maimon would discuss, indirectly, this chapter of the *Morgenstunden* once again, this time in German, in his essay "Ankündigung und Aufforderung zu einer allgemeinen Revision der Wissenschaften" (1792).⁴² This time his critique of the metaphysical argument raised against Spinoza by his opponents from the Leibniz-Wolf school would be much sharper.⁴³

Summary

Following Maimon's detailed historical analysis, and traveling together with him through the teachings of Giordano Bruno, Spinoza, Leibniz, Wolf, Mendelssohn and Kant, leaves us with one clear conviction: the unexpected unity of reason and matter, of mind and body⁴⁴ and of God and the world according to Maimonides the way Maimon reads and interprets him. Following Maimon's philosophical discussion, the way it moves between ontology and epistemology, one fact is clear: Maimon has no interest whatsoever in the ethical dimensions of the Kantian speculation. This might be explained as a part of his greater idealist move. Though preserving in a way the skeptical element of such former philosophers as Hume and Kant, Maimon implies speculative epistemology which enlarges the scope of human knowledge in a way that makes an integrative explanation of human nature possible. Within such a thought there is no longer any need to limit reason to make place for either faith or morality. This brings Maimon much closer to Spinoza and to a specific aspect in the thought of Maimonides that both he and Spinoza tend to emphasize. Against Spinoza (and

⁴² In III, 340-350.

⁴³ *Ibid.*, 348f.: "Wie kann man dabey gleichgültig seyn, wenn man das tief-sinnigste System des Spinoza bloß durch einige superfeine Distinktionen in Ansehung der Begriffe von Substanz und Freiheit über den Haufen zu werfen vorgiebt, da doch ein jeder, der in der Metaphysik Dogmatiker seyn will, zuletzt darauf kommen muß."

⁴⁴ On the similarity of these two problems see *Tr*, II, 62: "Wollen wir die Sache genauer betrachten, so werden wir finden, dass die Frage 'quid juris?' mit der wichtigen Frage die alle Philosophen von jeher beschäftigt hat, nämlich die Erklärung der Gemeinschaft zwischen Seele und Körper, oder auch mit dieser, die Erklärung von Entstehung der Welt (ihrer Materie nach) von einem Intelligenz; einerlei ist."; Buzaglo (1992), 63, 109.

in the same breath probably against Maimon as well) one can point to the different interpretation of Maimonides, suggested by a prominent Jewish (neo-) Kantian philosopher as Herman Cohen in his "Charakteristik der Ethik Maimunis".⁴⁵ Such a reading would put Cohen and Maimon at opposite poles of Jewish modern thought and would explain Cohen's systematic refutation of Spinozism.

This historical analysis can teach us an important lesson concerning the way Maimon uses his historical sources. Between the two opposite options — one of which interprets Maimon as a pre-Kantian, almost scholastic rationalist and the other of which represents him as an ultra-modern post-Kantian thinker manipulating his historical sources, a third option remains: that Maimon is a highly original and unique thinker who belongs completely to his age. As such, and in accordance with his understanding of history and of the historicity of thought, Maimon plays a conscious and highly developed political game with the main parts of the history of philosophy. In that game a very significant role is assigned to the teachings of Maimonides. This reading of Maimon's Jewish predecessor is motivated by personal as well as communal reasons. For Maimon as an individual person, the figure of Maimonides plays a major role in his conversion to philosophy. This personal experience he interprets as his mission to translate for his two "ideal communities" in a way that might contribute to each of them. In the condensed intellectual process that would take place within a period of no longer than three years, all these aspects of his reason—the formulation of Maimon's own interpretation of Kant, the publication of his German-language autobiography (including the discussion of Maimonides' ideas) and the Hebrew commentary on the *Guide*—would be simultaneously fulfilled. Reading these simultaneously, in the same way they were written, might not only improve our understanding of each isolated work; it might also help us to grasp something of the complex personality standing behind all of them.

⁴⁵ Bacher, Brann and Simonsen (1971), 131f.; Bruckstein (forthcoming).

MAIMON'S SUBVERSION OF KANT'S
CRITIQUE OF PURE REASON:

There are no Synthetic *a priori* Judgments in Physics

GIDEON FREUDENTHAL

Maimon characterized his philosophical position as “rational dogmatism and empirical skepticism” (*Tr*, II, 436). In this paper I concentrate on the latter half of this description, and argue that Maimon’s empirical skepticism subverts and jeopardizes Kant’s project in the *Critique of Pure Reason*.¹

Kant’s transcendental philosophy rests on the assumption that we do have valid synthetic judgments *a priori*, and he elaborates an answer to the question of how these are possible. The said synthetic judgments *a priori* were to be found in mathematics and in an apodeictic part of physics, which Kant called “pure physics”. He constructed this pure physics in his *Metaphysical Foundations of Natural Science* on the basis of geometry and a “logic of realities” governing positive predicates which he called “real opposition”. This “logic of realities” was intended to bridge the gap between mathematics and physics, between motions and forces. Maimon criticized the concept of “real opposition”, maintaining that it was merely empirical. Thus he undermined Kant’s project by arguing that physics is entirely *a posteriori*, hence also more or less probable, but not apodeictic. Whereas Maimon’s “empirical skepticism” subverts and checks all “dogmatic” philosophy, “critical” and “speculative” alike, he nevertheless entertained the ideal of “rational dogmatism”. His unique position consists in upholding both these seemingly incompatible doctrines.

¹ For suggestions and criticism I am indebted to Jan Bransen, Paul Franks, Klaus Hamberger, Wolfgang Lefèvre, Peter McLaughlin, Helmut Pulte, Volkmar Schüller, and Yaron Senderowics. The final version of this paper was written during my stay at the Max-Planck-Institute for the History of Science, Berlin. I am very grateful for the hospitality I enjoyed there.

1. *The Role of Apodeictic Physics in Kant's Philosophy*

“The general Problem (*Aufgabe*) of Pure Reason” says Kant under this heading in the second edition of the *Critique of Pure Reason* is to answer the question: “How are synthetic judgments a priori possible?” (*CpR*, B 19) That such synthetic judgments a priori exist is proved by the fact (*Factum*) that “pure mathematics and general science of nature” exist (*CpR*, B 128). Thus the answer to the question of how such judgments are possible also answers the following questions (*CpR*, B 20):

“How is pure mathematics possible?
How is pure science of nature possible?”

And Kant continues (*CpR*, B 20-21):

“Since these sciences actually exist, it is quite proper to ask *how* they are possible; for that they must be *possible* is proved by the fact that they are *real* (*wirklich*)”. – [my italics].

Kant's project hence depends on his establishing that such sciences do exist. The task is not the same for mathematics as for physics. The claim that mathematics is “evident” (i.e., apodeictic) was generally accepted; Kant had to prove that it was synthetic and not (as Leibniz maintained) analytic. As to physics, the claim that it is synthetic was generally accepted; Kant had to prove that it was apodeictic. It seems, however, that he assumed that this latter was commonly accepted; at least he affirmed a few years later that “all natural philosophers” concurred in believing that natural laws should be of “apodeictic certainty”.² In the second edition of the

² See *Metaphysische Anfangsgründe der Naturwissenschaft*, AA, IV, 472: “All natural philosophers who wanted to proceed mathematically in their work [...] rightly held that letting merely empirical principles prevail in these questions would be not at all compatible with the apodeictic certainty which they wanted to give to their natural laws...”

One such influential view is Leonhard Euler's, as expressed in the preface to his “Mechanica” of 1736: “In the second chapter, I investigate what effect a force acting on a free point, be it at rest or in motion, must exercise. From here the true principles of mechanics are derived, from which everything pertaining to the change of motion must be explained. But since these are very easily confirmed, I demonstrate that they are conceived not as merely certain but also as necessarily true (*ut non solum certa, sed etiam necessario vera esse intelligunter*).” – Euler (1912), 10.

Compare this view with Henry Pemberton's, quoted below.

Critique of Pure Reason (1787), he in fact conceded that the existence of "pure natural science" could be doubted (*CpR*, B 21n.), but at that time he believed to have already shown in the *Metaphysical Foundations of Natural Science* (1786) that there was, indeed, such physics as was both synthetic and apodeictic.³

It is important to distinguish clearly here between "apodeictic" and "certain" knowledge. Practically all philosophers (Maimon included) were firmly convinced that Newtonian science was true. The essential difference was whether it was considered (like logic) apodeictic or as certain as the very best empirical knowledge can be; whether, that is, it was *a priori* or *a posteriori*. Only the first view (which Maimon did not share) justifies Kant's project in the *Critique of Pure Reason* as presented above.⁴ Whether or not this interpretation is endorsed, it was certainly Maimon's understanding of Kant. It cannot be doubted, writes Maimon (III, 429n.),

Ernst Cassirer saw in Euler the "philosophische Mündigkeitserklärung der neuen mathematischen Wissenschaft" (Cassirer (1974), 477), since henceforth it was science and not philosophy which determined the criteria of "objectivity": Philosophy was not to dominate experience "but merely to understand it and lay bare its fundamentals" (Ibid.). In his "Réflexions sur l'espace et le temps" (1748), Euler stated clearly that in metaphysical investigations concerning nature, the certainty of mechanical principles and not metaphysics should take precedence (§ 1 and 2; cf. Cassirer (1974), 475-476). Cassirer sees in this reversal of roles between philosophy and science a preparation for Kant's systematic philosophy, which builds on this principle.

³ Indeed, in the *MÄNW* ("Mechanics", Prop. IV; *AA*, IV, 544), Kant presents his deduction of Newton's three laws of motion (and in Newton's exact formulation) in an *a priori* fashion. Concerning the third law (*actio est reactio*), Kant remarks (*AA*, IV, 549) that Newton "did not dare to prove it a priori and therefore appealed to experience." The derivation of this "lex antagonismi" builds on the compounding of motions in the "Phoronomy" (*AA*, IV, 551), which will be considered later in this paper.

Stadler (1883), 185 and 189, emphasized the difference between the empirical epistemological status of the laws of motion according to Newton and their *a priori*, necessary nature according to Kant.

In the introduction to the second edition of his *Critique of Pure Reason*, Kant merely names some such synthetic *a priori* judgments of physics. The "*physica pura*" or "*rationalis*", which contains these principles or laws, deserves, so he says (*CpR*, B 17, B 21n.), to be "separately dealt with in its whole extent" as an independent science. Exactly this is what he undertook in his *Metaphysical Foundations of Natural Science*.

⁴ On the widespread view that Newton's mechanics was certain and on the understanding of the analytic-synthetic method which gave it the appearance of *a priori*, see Freudenthal (1986), 70-71.

...that Kant's critique is a priori [...] but, as is clear, hypothetical, since, according to my firm conviction, Kant never intended to refute the Sceptics with his system. Kant's way of philosophizing is this: Since the Dogmatics attribute objective truth and generality to propositions of experience, and presuppose them as a fact, they must grant whatever is necessarily connected with this fact, which according to their presupposition is real, and without which this fact would not be possible. But since this is real only as a condition of the possibility of this fact, it cannot be of any use without it.⁵

Maimon's critique of Kant can be summarized succinctly as substituting "if" for "since" in this presentation of Kant's philosophy. *If* it is a fact that pure mathematics and physics exist and are objectively certain, then the fact must also be possible; and if it is possible, we may also inquire into *how* it is possible. But do we, in truth, have good arguments for the claim *that* pure physics in Kant's sense is real?⁶ Maimon believes that we have no good arguments to support the claim, and thus he doubts what the Neo-Kantians were to call "*das Faktum Wissenschaft*".

1.1. *Maimon's Criticism of Kant's Assumptions*

In accord with Kant's double claim concerning the *possibility* and the *existence* of synthetic judgments *a priori*, Maimon's critique is also double: first, he criticizes Kant's account of the *possibility* of synthetic judgments *a priori*, offering an alternative account of what the allegedly synthetic judgments *a priori* are; second, he calls into question the *reality* (i.e., the *existence*) of synthetic judgments *a priori*.

Maimon's critique of the possibility of synthetic judgments *a priori* rests on his argument that the forms of understanding and the forms of intuition are heterogeneous, whereby the application of the former to the latter and thus the formation of synthetic judgments *a priori* appears impossible. True, Kant saw the problem and attempted to resolve it with the introduction of a mediating device ("schematism"), but Maimon (and others) found this

⁵ Concerning the dependence of Kant's *Critique* on the *quid facti*, see also Maimon, IV, 210-211, 225-226, 229

⁶ I will not discuss here Maimon's view of mathematics, which is also very different from Kant's.

solution unconvincing. This argument of Maimon's has received much attention and also adequate appreciation.⁷

Maimon's second line of criticism, namely his doubting that synthetic judgments *a priori* exist in the first place, was hardly taken into account, and, insofar as it was, it was not interpreted against the background of Newtonian Science — the *Faktum Wissenschaft* to which it referred. On systematic grounds, this line of criticism deserves precedence over the first. This is so because, as Kant candidly acknowledged, if the *reality* of synthetic judgments *a priori* is not established, then their *possibility* is of no concern. It is the thesis of this paper that Maimon successfully undermined Kant's claim that there are synthetic judgments *a priori* in physics and therefore also successfully undermined his project in the *Critique of Pure Reason*.

Maimon's criticism of Kant's answer to the *quid facti* (i.e., whether we have synthetic judgments *a priori*) can be summarized thus: Suppose that we have *a priori* knowledge of necessary general principles or laws of nature; how could we know that the empirical cases we observe are instantiations of these?⁸ Maimon often gives the following example: Suppose that objective causality is admitted (*pace* Hume); this would not ground any of our actual causal statements as an instantiation of it. The statement that "each effect has a cause" may be *a priori* and necessary. But it does not entail that fire warms stones.⁹ We know that fire warms stones only from

⁷ See Engstler (1990) and Bransen (1991).

⁸ It seems to me that this is also the conclusion of Michael Friedman's interpretation of Kant. He asks what guarantee we have that the conceptual structure of Newtonian physics as constructed *a priori* by Kant will also be compatible (or even contained in) the specific laws arrived at empirically: "In the absence of such a guarantee we have no assurance whatsoever that the two aspects of the critical system will harmonize with one another, and we are thus faced with the possibility of precisely a 'gap' in the critical system."

At the end of his chapter on the *MANW*, Friedman concludes that "there can be no *a priori* guarantee, however, that the proper object of pure understanding, namely, objective experience, is in fact constructible. In the end, only the utterly remarkable success of Newton's *Principia* itself shows that — and how — objectivity is realized." (Friedman (1992), 51-52; see also Friedman's conclusion in his interpretation of the *MANW*, *ibid.*, 164.)

Maimon would have subscribed to this conclusion, I believe.

⁹ Maimon also argues that the statement "every effect has a cause" is analytic and not synthetic because "cause" and "effect" are correlative concepts (*Wechselbegriffe*). Such concepts define each other (See *Tr*, II, 37). The statement "Each cause has an effect" is therefore *a priori* and necessarily true. But it is also

experience. Thus even if we have an elaborate system of categories and principles, this does not entail that the empirical knowledge we also have (or believe we have) follows from the application of these forms to sensations and intuitions and is, therefore, of universal and necessary validity; it could just as well be the case that the categories and principles have no application, and that the knowledge we have is derived from experience and is of merely empirical validity.

Herein lies the importance of the *Metaphysical Foundations of Natural Science* for the *Critique of Pure Reason*: it aims to prove that we do in fact possess a "*physica pura*" *a priori*, whereby the system developed in the *Critique of Pure Reason* does indeed apply to knowledge.¹⁰

In the preface to his book, *An Essay on Transcendental Philosophy* (*Tr*; 1790), Maimon refers to Kant's distinction between "proper" and "improper" science in the preface to the *Metaphysical Foundations of Natural Science* (*AA*, IV, 468). "Proper science", says Kant, is only that "whose certainty is apodeictic" and which "would treat its object wholly according to *a priori* principles"; Maimon, by contrast, writes (*Tr*, II, 2) that there are "merely two so-called proper sciences, in as much as they are based on *principles a priori*, viz. *mathematics* and *philosophy*".

Thus, whereas Kant distinguished between "proper" and "improper" sciences (mathematical physics versus chemistry) and also between the "pure" apodeictic part *a priori* and the merely empirical "applied" part within mechanics, Maimon maintained that all science of nature is empirical and of merely inductive certainty.

analytic and not synthetic. We could also say that the statements "x is the cause of y" and "y is the effect of x" refer to but one fact in the world. This, of course, does not imply that a certain event is the cause of a certain effect, nor even that there are any causes and effects in the world.

¹⁰ Needless to say, I cannot argue here *in extenso* for the dependence of the *Critique of Pure Reason* on the *Metaphysical Foundations of Natural Science*, but the dependence of the *quid juris* on the *quid facti* was explicitly affirmed by Kant and seems well-established. The far-reaching importance of the *Metaphysical Foundations of Natural Science* for the changes in the second edition of the *Critique of Pure Reason* was first stressed by Plaass (1965 and 1994).

Since Maimon doubts that empirical knowledge results from the application of *a priori* concepts and principles to perception, he draws the borders differently than Kant: namely, between mathematics and philosophy as pure and *a priori* on the one hand and all natural science as *a posteriori* and contingent on the other.

Kant's philosophy together with the science it grounds should be conceived as an hypothesis of ever growing certainty, but one which can be jeopardized through the refutation of the science thus grounded.¹¹

2. *The Rule for Compounding Motions and Forces*

"Proper science" as conceived by Kant in the *Metaphysical Foundations of Natural Science* attempts to lay the foundations of a theory

¹¹ Note also that whereas Kant declares that metaphysics *a priori* is impossible, Maimon names "philosophy" together with "mathematics" as the only apodeictic proper sciences. This is the positive part of his program of "rational dogmatism and empirical skepticism".

Kant and Maimon agree that mathematics is *a priori* and apodeictic, but they differ profoundly in their interpretation of mathematics and of the necessity of its propositions. I will not discuss this issue here, and just remark that, with the exception of algebra, the necessity of mathematical synthetic propositions is merely subjective for Maimon, since the objects must be "given" in intuition.

Maimon's allusions to the *Metaphysical Foundations of Natural Science* in the introduction to *Tr* support the thesis that he already saw in that work and in the *Critique of Pure Reason* two steps in one argument. That he was already familiar with the *Metaphysical Foundations of Natural Science* follows from his explicit statements concerning his reading of Kant. He wrote to Kant (April 7, 1789; AA, VI, 424) saying that he had read his "immortal works". If he did not mean *all* his writings, he surely intended those which had appeared over the preceding years, and these include the *Critique of Pure Reason* and the *Metaphysical Foundations of Natural Science*.

Engstler's suggestion (1990, 28n. 3) that Maimon means here both editions of the *Critique of Pure Reason* and the *Prolegomena* is unconvincing, especially since he himself (*ibid.*, 35n. 25) draws attention to the aforementioned allusion to the *Metaphysical Foundations of Natural Science* in Maimon's introduction to *Tr*. We also know that Maimon referred indiscriminately to both editions of *CpR* when writing *Tr*. He cites examples mentioned only in the second edition, but his verbatim quotations are all taken from the first edition (to which Maimon simply refers as to the *Critique of Pure Reason*). I presume that he was unaware of the importance of the differences between the two editions.

In his essay "Baco und Kant" (1790), Maimon speaks of three main parts into which Kant's philosophy can be divided. The third is the application of the critique of pure reason, i.e., "the critique of practical reason, of nature, etc." (II, 512). I understand this latter expression to refer directly to the *Metaphysical Foundations of Natural Science*.

Already in his commentary to the *Guide* of Maimonides (end of 1790), Maimon seems to hint at the *Metaphysical Foundations of Natural Science* (*Giv'at Hammore*, 170-171; Commentary to the *Guide*, I, 67). He refers there to the dynamic explanation of a material body's impenetrability, and states that it is impossible "ihn zu durchdringen". This Kantian expression, however, was also used by Euler.

In his "Ankündigung und Aufforderung" (III, 340-350) of 1792, Maimon explicitly names the *Metaphysical Foundations* (III, 344).

which explains the constitution of material bodies and their interactions as the effects of motive forces. In addition to the general requirements of knowledge according to Kant (forms of intuition, categories, etc.), there are some specific requirements set by a theory of the kind of Newtonian mechanics.

Newtonian mechanics purportedly describes the motion of bodies on the basis of the three Newtonian laws. But these three laws alone suffice at most to determine the central forces between two point masses. Whenever more bodies and therefore also more forces are involved, a rule is needed for compounding and resolving them. This is an instantiation of the analytical method in science: A phenomenon is conceived as a complex combination of several components.

It is thus that we find in Newton's Law II (stating the proportionality of the "alternation of motion" and the "motive force impressed") and in Corollaries 1 and 2 to the Laws of Motion, a rule for the resolving and compounding of motions and forces. The elucidation of Law II deals with all three cases of compounding the body's previous motion (or its *vis inertiae*) with the motion produced by an impressed single force: when they are in the same or opposite sense, and, finally, in oblique directions.

In Cohen's recent translation (Newton (1999), 416-417), which is very faithful to the Latin original, the elucidation to Law II reads thus:

If some force generates any motion, [...] and if the body was previously moving, the new motion [...] is added to the original motion if that motion was in the same direction or is subtracted from the original motion if it was in the opposite direction, or, if it was in an oblique direction, is combined obliquely and compounded with it according to the directions of both motions.¹²

In the eighteenth century, Motte (Newton (1962), 13) translated the phrase referring to the third case thus:

...or obliquely joyned, when they are oblique, *so as to produce a new motion* compounded from the determination of both. – (my italics)

¹² The Latin original (Newton (1972), 54-55) reads: "Et hic motus (quoniam in eandem semper plagam cum vi generatrice determinatur) si corpus antea movebatur, motui ejus vel conspiranti additur, vel contrario subducitur, vel obliquo oblique adjicitur, & cum eo secundum utriusque determinationem componitur."

The reason for Motte's seemingly unmotivated addition becomes clear when we realize that in the case of oblique motions under consideration the rule of compounding does not coincide with the arithmetical rules of addition and subtraction. By calling it a "new" motion, Motte emphasizes the fact that in this case the "compounding of motions" (or forces) cannot be conceived as addition (of scalar magnitudes). The motion is new because it neither contains all the parts of the components (as in addition) nor some of them (as in subtraction); it is "new" because none of its parts can be identified with a part of its components.

Following the laws of motion, we find in Newton two corollaries which deal with the compounding and resolving of forces. Corollary 1 refers back to the elucidation of Law II (Newton (1962), 21; figure 1); Corollary 2 (Newton (1962), 22) draws the general conclusion that,

"...the composition of any one direct force [...] out of any two oblique forces [...] and, on the contrary, the resolution of any one direct force [...] into two oblique forces" conform to the parallelogram rule: "which composition and resolution are abundantly confirmed from mechanics.

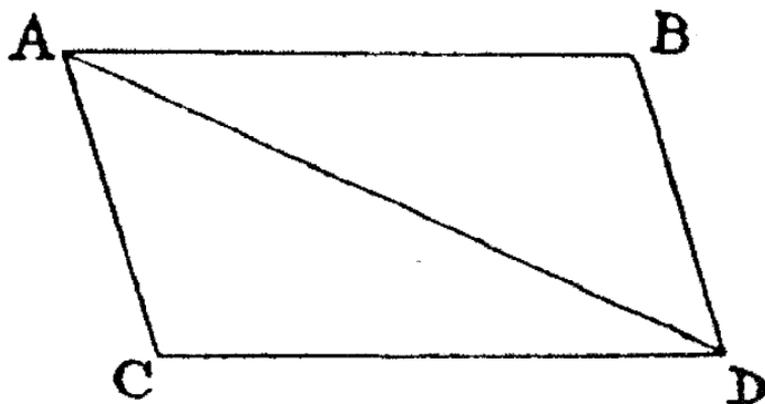


FIGURE 1

In the sequel, Newton demonstrates the technique of resolution of forces in cases of equilibrium of "Mechanical Powers" (ibid., 24), i.e., in "statics".

Thus Newton believes that the validity of the parallelogram rule for statical "forces" in equilibrium which do not produce motions substantiates its validity also for "forces" in dynamics which produce "movements". Indeed, many attempts were made over the following centuries to prove the rule of compounding forces. Kant's attempt to "construct" the rule of compounding forces in the *Metaphysical Foundations of Natural Science* and Maimon's criticism of this proof are thus embedded in the discussion of the foundations of physics at the time.¹³ In fact, not only the proof of the theorem was at stake but also its very conceivability. This problem will be discussed in the next section.

2.1. *The Paradoxes of Compound Motion and Force; Russell and Neile*

In analogy to Kant's argument that arithmetic is synthetic because the concept of the sum of two magnitudes is not contained in the concept of either of them individually (*CpR*, B 16, 204-205), we can say that the concept of the resultant is not contained in the concept of any of its components. Still, an important difference lies in the fact that, whether synthetic or analytic, the truth and necessity of arithmetic were not questioned. The case of the rule of compounding forces was very different. In fact, at least until Galileo, the prevailing view was that when two forces act simultaneously upon a body, the body should be endowed with two motions, i.e., with contrary properties (contrary directions or accelerated and decelerated motions), but since "contraries" exclude each other from the same substance, the body must assume these properties successively and not simultaneously.¹⁴

However, the rule of compounding forces also involves conceptual problems in frameworks other than Aristotelian philosophy.

¹³ Newton's presentation suggests that the theorem may be derived both from kinematics — on the assumptions that forces are proportional to velocities and independent of one another (the second assumption is not explicitly stated by him) — and from statics.

¹⁴ See Damerow (1992), 78-91.

The general conceptual problem was succinctly formulated by Russell (1900, # 50, p. 98) as follows:

When a particle is subject to several forces, they are compounded by the parallelogram law, and the resultant is regarded as their sum. It is held that each independently produces its effect, and that the resultant effect is the sum of the partial effects [...] But it has not been generally perceived that a sum of motions, or forces, or vectors generally, is a sum in a quite particular sense — its constituents are not part of it.

It is an antinomy, says Russell (1937, # 451, p. 477):

...the whole has no effect except what results from the effects of the parts, but the effects of the parts are non-existent.

If, in order to avoid Russell's problem, we were to maintain that the components of motions exist, then we would confront a different problem, which William Neile already formulated in the seventeenth century. In the late 1660s he objected to the concept of compound motion because it explicitly states that a body is simultaneously moved in two different directions:

I can allow particles to be moved alternately by several waies but not by a mixt compounded motion for the determination of the motion one certain waye takes awaie all composition.

(Letter to Oldenburg, 18.12.1668; Oldenburg (1968), 264).

We hence have a double antinomy: If the components of motion actually exist, then the body must simultaneously move in two directions (this is Neile's problem); if only the resultant actually exists, then it cannot be the sum of the components because these do not exist. The same applies *mutatis mutandis* to forces, as well (see Russell above).

From these antinomies, far-reaching and devastating consequences follow: It seems that the notion of "complex causality" is vacuous, that causal statements cannot be based on analysis and synthesis of phenomena and explanatory entities. Russell (1903, §448, pp. 474-475) therefore suggested that the state of the entire world in one moment of time should be considered the cause of the state of the entire world in the following moment:

...the only causality occurring in Dynamics requires the whole configuration of the material world as a datum, and does not yield relations of particulars to particulars, such as are usually called causal.

With this, science as we know it would be impracticable. By introducing the parallelogram rule, Kant attempted to solve two problems at once: the conceivability and the necessity of the rule.

3. *Kant's Introduction of the Parallelogram Rule*

The longest section in Kant's *Metaphysical Foundations of Natural Science*, "Phoronomy", is dedicated to a careful "construction" of compound motion. It is intended to form the basis for that part of physics which is "science proper" (and not science "improperly" so called). "Science proper" in Kant must be of "apodeictic certainty" and *a priori* (*Metaphysical Foundations of Natural Science*, AA, IV, 468). In contradistinction to metaphysics, which proves the possibility of concepts by pure reasoning, mathematical construction in pure intuition proves the real, objective possibility of objects as "natural things" in space and time (AA, IV, 469-470). In the chapter on "Dynamics" Kant applies the theorem to forces, as well. Hence he attempts not only to solve both Neile's and Russell's problems, showing by construction that the concepts "compound motion" and "compound force" are *possible* (i.e., that they do not imply that a body moves simultaneously in two directions or that an effect exists which has no cause), but also that the compounding of forces can be proved on the basis of the compounding of motions, which is a necessary truth. If successful, there would be a necessary calculus of forces which could serve as the nucleus of *pure physics*. Kant would thus have taken the first step towards proving the *Faktum Wissenschaft*. Having demonstrated that there is a pure physics, the question could be asked: *how* was pure physics possible? — a question which the *Critique of Pure Reason* attempted to answer

3.1. *Phoronomy*

The first chapter of Kant's *Metaphysical Foundations of Natural Science*, "Metaphysical Foundations of Phoronomy", presents his construction of the compounding of motions, i.e., velocities. It constructs motion as a "magnitude" (*Größe*), i.e., out of parts homogeneous with the constructed whole. The parts of velocity are velocities (Observation to Explication 5; AA, IV, 489).

To construct the concept of a composite motion means to present (*darstellen*) a priori in intuition a motion insofar as it arises from two or more given motions united in one movable thing.

(Explication 4; AA, IV, 486)

Kant (AA, IV, 489, 492) explicitly excludes here considerations of “causes” and therefore carefully distinguishes between “motions” or “velocities” and “forces” (a distinction which was often blurred, as “motion” was frequently used to denote both “velocity” and “momentum”). The compounding of motions should be demonstrated “by congruence” (Note 2 to the Proposition; AA, IV, 493) to be a kind of addition, whereby (*pace* Russell) the parts may be conceived as “contained” in the compound motion, even though motion is not an “extensive” magnitude, i.e., although the parts of velocity do not coexist alongside one another (Note 2 to the Proposition; AA, IV, 490).

The principle of construction introduced by Kant rests on the definition of motion as “the change of the external relations” of a moving body to a given space (Explication 2; AA, IV, 482). On the basis of this definition, the “principle” could be introduced that the motion of a body in relation to a space in rest is equivalent (“congruent”) to the motion of the space with opposite velocity (“Principle”; AA, IV, 487). Thus a body’s motion composed of two motions could be constructed out of one motion of the body in relation to a space in rest, and another motion of a space moving with equal speed in the opposite direction, thus equivalent to the second motion of the body.

Since all construction of magnitudes out of any number of components can be reduced to the compounding of two magnitudes, because the constructed compound motion can again be compounded with a further motion (AA, IV, 489); and since, moreover, all three cases of compound motion considered by Kant — in the same direction, in opposite directions, and “enclosing an angle” — can be reduced to the last-named (by construing the angle as infinitely small or as 180°), the construction of this one case encapsulates the entire range of compound motion (AA, IV, 495).

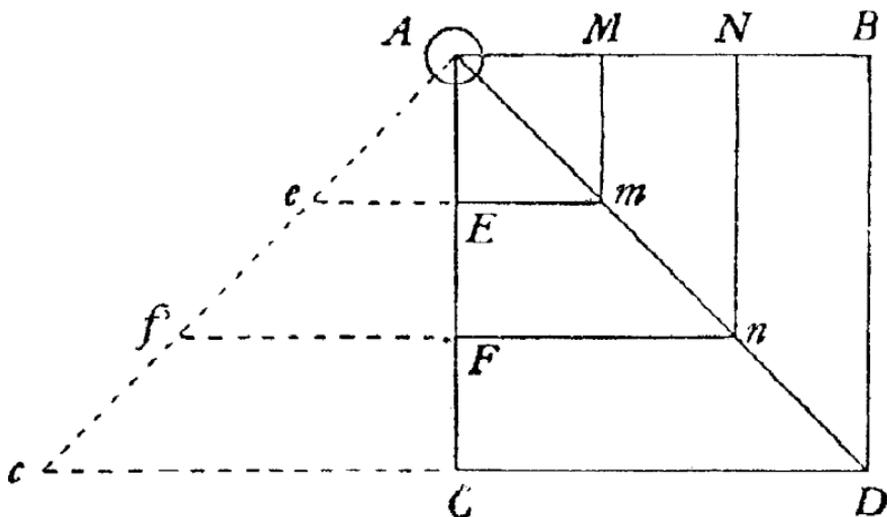


FIGURE 2

... Let the motion AC be assumed as taking place in absolute space; but instead of the motion AB, let the motion of the relative space in the opposite direction be assumed. Let the line AC be divided into three equal parts, AE, EF, FC. Now, while the body A in absolute space traverses the line AE, the relative space, and with it the point E, traverses the space $Ee = MA$. While the body traverses the two parts together = AF; the relative space, and with it the point F, describes the line $Ff = Na$. While finally, the body traverses the whole line AC; the relative space, and with it the point C, describes the line $Cd = Ba$. All this is the same as though the body A has traversed in these three divisions of time the lines em , Fn , and $CD = Am$, An , Ab , and in the whole time in which it traverses AC had traversed the line $CD = Ab$. Therefore, it is at the last moment at the point D and in this whole time is gradually at all points of the diagonal line AD, which, accordingly, expresses the direction as well as the velocity of the composite motion.

(AA, IV, 492-493)¹⁵

¹⁵ This technique is not different from techniques proposed previously (e.g., by d'Alembert), according to which the body moves along a surface while the surface is moved in space. The technique is the same, but the conception is very different. Kant's technique does not involve material frames of references (surfaces) and thus it does not involve forces either. It therefore does not fall under what Kant calls "mechanical constructions" (AA, IV, 493), which should be excluded in this pure doctrine of magnitude. This was evidently not clear to

The ingenious technique which Kant applies to construct compound motion consists in representing it as if it were an extensive magnitude, since its components and the resultant coexist each in a different frame of reference. Neither Russell's nor Neile's paradox arises this way.

3.2. *The Dynamical Construction of Matter and "Real Opposition"*

The second chapter of the *Metaphysical Foundations of Natural Science* presents the construction of the concept "matter" inasmuch as it fills space. Kant explains the property of "filling space" as the resistance of the body present in this space which prevents an approaching body from intruding into this same space. Impenetrability is thus explained as the power to stop another body at the borders of the relevant space (see Explication 1; AA, IV, 491). Since force is conceived as the causal agent generating and destroying motions, Kant infers that impenetrability (destroying or reversing the motion of the approaching body) is the effect of a "repulsive" force: filling space thus involves the relation of a cause to an effect (*Dynamics*, note to Explication 1; AA, IV, 496). The extension of the body can also be explained as the effect of this repulsive force, which is said to expand spherically and is checked by an opposite "attractive" force. The volume of a material body (equivalent to the impenetrable space) is thus conceived as the result of an equilibrium between these two forces, and Kant even attempts to deduce their ratios, although he clearly says that the specific ratios are not part of the "metaphysical construction" of the concept of matter (AA, IV, 522-523).

The principal problem, however, is whether Kant can provide a metaphysical or mathematical construction of a concept which involves (as he says) causality. The construction should generate *a priori* and apodeictic knowledge. But can causal relations be deduced? And, if so, from what principles? Or do they depend on empirical knowledge? And, finally, is there a means by which empirical knowledge can be inferred from pure knowledge? I will

his contemporaries; see Kästner's review of the *Metaphysical Foundations of Natural Science*. See also Maimon's criticism of the "mechanical constructions", discussed below.

now show that Kant used the concept of "opposition of realities" to achieve exactly this: i.e., to infer empirical knowledge from *a priori* knowledge.

In his "general Addition to Dynamics" Kant correlates the repulsive force with the category "Reality", the attractive force with "Negation", and limited expansion, as well as the degree of dynamical filling of space, with "Limitation". Reference to these categories points both to the *Critique of Pure Reason* (B 106) and to the preface of the *Metaphysical Foundations of Natural Science*, in which Kant discusses the contribution of special to general metaphysics, saying there that in all cases in which general metaphysics requires instances "in order to provide meaning to its pure concepts of the understanding", it must always take them, the instances, from "the general doctrine of body".

And so a separated metaphysics of corporeal nature does excellent and indispensable service for general metaphysics, in that the former provides instances (*cases in concreto*) in which to realize the concepts and propositions of the latter (properly, transcendental philosophy), i.e., to give to a mere form of thought sense and meaning.

(AA, IV, 478)

Kant names two such concepts (AA, IV, 478): "the possibility of an opposition of realities, the possibility of intensive magnitude".

Now, intensive magnitude was the topic of Chapter 1 on the compounding of motions: Velocity is an intensive magnitude, and Kant showed that it can be compounded out of any number of coexisting velocities as if it were an extensive magnitude. The "opposition of realities" refers to the opposition of forces, which first appears in Chapter 2 on "Dynamics". The "realities" in question are forces and their effects, i.e., velocities produced and spaces filled or traversed.¹⁶ The argument proceeds from the

¹⁶ In *Negative Magnitudes*, where Kant developed a general "logic" of opposition, he recommended the opposition of motions (and forces) not merely as a "case in concreto" for metaphysics but as a "case in concreto" (he used this phrase there, as well) for other kinds of opposition.

"Just as everything which appertains to motions can be rendered clear and intelligible to intuition, so, by contrast, the real grounds within us, which are not mechanical in character, reveal themselves to be difficult and indistinct, if any attempt is made to explain the relationship between them and their consequences, whether in opposition or in harmony" (AA, II, 194; see Kant (1992), 203-241, here: 231-232.)

compounding of motions (“Phoronomy”) to the compounding of forces (“Dynamics”). As we shall see, Kant introduces a “logic of opposition of realities” to bridge the gap between the compounding of motions and the compounding of forces, and this move is criticized by Maimon.

The proposition of “Dynamics” and its proof read as follows:

Proposition 1

“Matter fills a space, not by its mere existence, but by a special moving force”

Proof

“Penetration into a space (in the initial moment this is called the endeavor [*Bestrebung*] to penetrate) is a motion. The resistance to motion is the reason why motion diminishes or even changes to rest. Now, nothing can be combined with any motion as lessening or destroying but another motion of the same movable thing in the opposite direction (phoronomic proposition). Consequently, the resistance offered by matter [...] is a *cause of the motion* of this other matter in the opposite direction. But the cause of a motion is called moving force. Consequently, matter fills its space by moving force and not by its mere existence.”

(AA, IV, 497 – my italics)

The proof consists of a series of substitutions of terms until the proposition sought is established (AA, IV, 497). The filling of space is (1) equated with resisting penetration; penetration is (2) equated with motion; hence (3) the filling of space is equated with reducing or canceling motion. But (4) nothing reduces or cancels motion but opposite motion (by phoronomical proposition);¹⁷ hence (5) filling space is the cause of motion in the contrary direction of the approaching bodies. But (6) the cause of motion is force; hence (7) the filling of space is in fact a moving force.

See also *CpR*, B 329: “General mechanics can indeed give the empirical condition of this conflict [of velocities] in an *a priori* rule, since it takes account of the opposition in the directions of forces.”

¹⁷ Kant’s reference to “phoron. proposition” at this point is imprecise. The proposition itself only states that simultaneous motions have to be conceived as one motion of the body and another of the frame of reference. The argument that only motion reduces motion is indeed given in the phoronomy, but not fully in the proposition itself.

Kant then explains that this force is the “repulsive force”, which is contrary to the attractive force (AA, IV, 498-499): Whereas the attractive force causes a body to approach another (and finally to penetrate it), the repulsive force repels it (and prevents penetration). Kant argues that this repulsive force must have a degree and allow for a greater or lesser force (Proposition 2; Proof: AA, IV, 499). The repulsive force cancels the same absolute magnitude of opposite motion in the approaching body as it would produce if it were applied to this body at rest.

Now, while we have ostensibly merely transformed expressions by substituting equivalent terms, we end up with new knowledge: force is a vector, i.e., of an (absolute) magnitude and a direction, proportional to velocity, and it may be subjected to the very same calculus as velocities, i.e., the compounding of forces may be reduced to the addition of velocities. Now, as long as only one body and one force were involved, we could conceive the proportionality of “force” and motion as merely a definition of “force”. The interaction between forces and bodies is certainly a causal process, and determining the outcome of this causal interaction on the basis of the calculus for velocities presupposes that “forces” are compounded as velocities. This presupposition is not a necessary truth: forces could be scalar magnitudes or influence each other when simultaneously applied. Thus the application of the parallelogram of motions (which can be reduced to geometry) to forces requires justification or empirical confirmation. Neither is offered by Kant. In the proof of Proposition 1, quoted above, he moves without further ado from opposing “motions” to opposite “forces” (or from “motion” in the phoronomical sense of “translation” to “motion” in the dynamical sense of “quantity of motion” [*mv*]), and in the proof of Proposition 2 he applies the addition of motions to the causal interaction of the “repulsive force” with the “motion” of the penetrating body.¹⁸

Note that we have here a special relation: Not the lessening or destroying of motion by motion, nor of force by force, but of an effect (motion) by an opposite cause (force). Thus it is not the

¹⁸ I formerly believed that this crucial but unwarranted move had not been noticed until now. But while preparing the final version of this essay, I discovered that it had, in fact, been noticed and adequately analyzed by Stadler (1883), 67-70.

case that the force generates a velocity which diminishes the opposite velocity (according to the phoronomical construction), nor that the force destroys or diminishes the force generating the opposite velocity. Rather the relation holds between a force and an opposite velocity which is the effect of an opposite force. Let A and B be equal and opposite forces and a and b the opposite velocities they produce. The opposition results in A canceling b and B canceling a. This is the relation to which Kant refers as a case *in concreto* for the “opposition of realities”. And, indeed, the opposition of forces whereby each removes the effect of the other is precisely the core of Kant’s earlier work, *An Attempt to Introduce the Concept of Negative Magnitude into Philosophy* (1763). It is there, too, that he already gave exactly the same explanation of impenetrability of bodies on the basis of the action of a force:

A body, in virtue of its impenetrability, resists the motive force of another body attempting to penetrate the space which it occupies. In spite of the motive force of the second body, the impenetrability of the first body is nonetheless a ground of that second body’s rest. It follows from what has already been said that impenetrability just as much presupposes a true force in the parts of the body in virtue of which they collectively occupy a space, as does the force in virtue of which another body strives to enter this space.

... The Cause of impenetrability is thus a true force ...

(AA, II, 179)¹⁹

The argument for conceiving impenetrability as the effect of a repulsive force and the magnitude and shape of a body as the effect of an equilibrium of forces is the same in the *Metaphysical Foundations of Natural Science* as in the *Negative Magnitude*. In the latter, however, it is embedded in a comprehensive attempt to elucidate the notion of “negative magnitude” and show that a wide array of realities are vectors and thus justify the application of “vector addition” to causality. This is the justification that is missing in the *Metaphysical Foundations of Natural Science*.

¹⁹ The general thesis that material bodies are constituted by attractive and repulsive forces was entertained by Kant already in his *Monadologiae physicae* (1756), Propositions V, VI, X (AA, I, 480-481, 483-485).

3.2.1. Negative Magnitudes and "Real Opposition"

In his essay on the *Negative Magnitudes*, Kant elaborates the relations between causality, logic, and mathematics, and criticizes the attempt to reduce causality to logic.²⁰

Kant clearly distinguishes in this essay between "reason" (*logischer Grund*) and a "real reason" (*Realgrund*), i.e., a cause. The relation between a logical reason and its inferred consequence is dependent on the principle of identity (AA, II, 202). With causes it is very different. The relation between a "real reason" or a cause and the effect is "that, because there is something [the cause], something else is also [the effect]", or is abolished [the former state]" (AA, II, 202-203). In both cases the emphasis is on the "something else", on the heterogeneity of the cause and the effect; thus the concept of the effect is not contained in the concept of the cause as in logical inference.

...how am I to understand the fact, that, *because something is, something else is?* [...] Nor am I willing to be fobbed off by the words 'cause' and 'effect', 'force' and 'action'. For if I already regard something as a cause of something else, or if I attach the concept of force to it, then I am already thinking of the cause as containing the relation of the real ground to its consequence, and then it is easy to understand that the consequence is posited in accordance with the rule of identity.

(AA, II, 202-203)

In short: the causal relation is opaque to reason and thus it is significantly different from inference. Just as the principle of identity does not posit effects, the principle of contradiction does not cancel them, and Kant believes that this is all that can be said here (AA, II, 204). In the *MANW*, he expressed this fundamental difference between reasons and causes in the famous aperçu (AA, IV, 498): "The principle of contradiction does not repel any matter".

²⁰ Wolff (1981) discusses *Negative Magnitudes* extensively.

Bernard Bolzano is, to the best of my knowledge, one of the very few philosophers who have attempted to explain and define the concept of "opposition" introduced by Kant. He compliments Kant on having "conceived the essence of (mathematical) opposition more precisely than all his predecessors" (Bolzano (1929-1931), Volume 1, #107, Note 1, p. 105).

There are three points stressed by Bolzano in his definition of "opposite" which transcend Kant's discussion: 1. that the opposite of an object is unique; 2. that the definition of two opposite objects differ from each other only in a single element; 3. that the definition of each of the opposite objects depends on the other.

Another peculiarity of "causes" is that opposing causes may be simultaneously predicated of the same subject without yielding an inconsistency, whereas the predication of their effects would. We may say that two opposite forces act on the same body (*Bestrebung* standing for the traditional *conatus*), but we may not say that the body is actually accelerated in two directions. This difference entails an important difference between the results of such predications. All opposition, says Kant, both logical and causal, yields "nothing" (*nihil*). Opposition by contradiction yields "nothing at all" (*gar nichts*, *nihil negativum*, *irrepraesentabile*), whereas "real opposition" also yields "nothing" but of another kind (*nihil privativum*, *repraesentabile*), which can be equated with "0", "since this does not contain a contradiction" (AA, II, 171-172). Both causal predicates are positive (and hence no contradiction arises), but each cancels the *effect* of the other cause. The *causes* themselves are not canceled, and the subject of the statements is possible.²¹ Moreover, both positive predications of equal and opposite predicates yield a third, new proposition which attributes to the subject a zero degree of the relevant property. We can see here on what grounds the inference of a "new" property is possible. The opposition of realities is thus the missing link between the compounding of motions and forces in the *Metaphysical Foundations of Natural Science*.²²

4. Maimon's Critique of Kant

In 1793 Maimon published a German edition of Henry Pemberton's *A View of Sir Isaac Newton's Philosophy*, which originally appeared in 1728.²³ The German title, *Anfangsgründe der Newtonischen*

²¹ Kant consistently adheres to this conception of opposite forces canceling one another's effect, even in the *CpR*. Opposing realities, he says, "cancel each other's consequences and take a form like $3-3 = 0$." The examples given are of attractive and impelling forces on the one hand and of pleasure and pain on the other. ("Amphibolie der Reflexionsbegriffe", *CpR*, B 321)

²² Predicating two incompatible properties of the subject requires that these be conceived as potentials, and Kant (AA, II, 172) does indeed speak of "force" in this context in terms of "tendency" (*Tendenz*). Exactly the same conception is found again in the *Metaphysical Foundations of Natural Science*.

²³ Maimon's technique in this work (as in all his others) derives from the tradition of commentaries (see the introduction to this volume). He reprints many pages of Kant as notes to Pemberton's text, thus presenting the *Metaphysical Foundations of Natural Science* as a commentary to Pemberton and hence

Philosophie, is reminiscent of Kant's *Metaphysische Anfangsgründe der Naturwissenschaft* of 1786, lengthy parts of which are reprinted in Maimon's notes.²⁴

The topic on which Maimon quoted Kant most extensively is Newton's theorem of the compounding of motion and forces, the so-called "parallelogram rule". Maimon copied Kant's "construction" of the theorem from the "Phoronomie" of the *Metaphysische Anfangsgründe der Naturwissenschaft*. Where then is Maimon's contribution? In one point only. In his preface to the book, he says (IV, 543): "I quote from Kant the *way* of constructing compound motion [...], but I explain the *necessity* of this construction in a way different from his."

As we will see, Maimon thought that the construction of compound motion was necessary in order to render it conceivable, not in order to prove its necessity. In fact, he thought that the theorem — as all of physics predicated on it — was not necessary but contingent.

4.1. *Maimon on Different Interpretations of the Concept of Compound Motion*

Maimon considers the following construction of compound motion: Imagine a ball moving along a ruler while the ruler moves in a different direction. With reference to immovable space the ball moves in a compound motion along the diagonal of the parallelogram.

Now this construction is unproblematic if a point moves along a line. But when a ball and a ruler are involved, Maimon raises the following objection: In order to share exactly the motion of the ruler, the ball must be firmly connected to it; but then it cannot freely perform its own motion along the ruler; and if the ball is not attached to the ruler, so that it can freely move along it, then it will

as a super-commentary to Newton. Maimon's commentary on Kant is hence a super-commentary on Pemberton and a super-super-commentary on Newton.

²⁴ The title page of Maimon's edition states: "Translated with notes and a preface by Salomon Maimon." In the preface (IV, 542) Maimon asserts that not he, but a friend, translated the text. Maimon wrote the 13-page preface and 30 pages of notes. However, 20 out of these 30 pages of commentaries are simply and openly copied from Kant's *Metaphysische Anfangsgründe der Naturwissenschaft*. Maimon writes: "Here are his own words", and then he submits page after page from Kant. I have not yet found any discussion of this work of Maimon's.

not share the motion of the ruler. In short: This so-called “mechanical construction” of compound motion cannot guarantee the independence of the components and therefore cannot demonstrate *a priori* the objective reality of the concept.²⁵

One may attempt to resolve the difficulty by imagining that the ball is alternately fixed to the ruler and free from it. If we take these periods of time infinitesimally small, we can approximate compound motion along the diagonal with this zigzag motion — each motion being the pure effect of a sole component.²⁶ However, the concept of compound motion, says Maimon (*Pemberton*, IV, 556-557), will be “a mere idea or fiction, which we can approach in the representation (*Darstellung*), but never fully reach.”²⁷

Now, three interpretations of the theorem were considered and rejected by Maimon:

1) The literal sense of the parallelogram rule, which implies simultaneous motions in different directions; this notion is inconsistent.

2) The notion of a mechanical compounding of forces; this notion fails to guarantee the independence of the components.

3) The notion of alternating subsequent motions in the directions of the components; this notion approximates compound motion but differs from it on principle. Let me add, moreover,

²⁵ An excellent critique of this construction and of other attempts to prove the rule of compounding motions was published earlier by Daniel Bernoulli. He did not, however, criticize these proofs in order to argue that the rule was empirical and, as such, contingently true; on the contrary, he wanted to confer upon the rule in dynamics the same status as a *verité de raison*, a necessary truth, which, he believed, was proper to statics. He therefore elaborated his own proof of the parallelogram rule. As a preparation for its presentation, he provided a trenchant critique of previous proofs which is worthy of consideration, especially since many later proofs — Kant’s included — did not absorb its lesson, and also because Maimon’s later critique of Kant’s proofs focuses on exactly the same points — presumably without knowledge of Bernoulli’s paper. Kant, by contrast, was familiar with it, and referred to it in his early *Gedanken von der wahren Schätzung der lebendigen Kräfte*, AA, I, 1-181, # 128, p. 150-151.

²⁶ “I can allow particles to be moved alternately by several waies but not by a mixt compounded motion”, said Neile. See above.

²⁷ Note that Maimon says “a mere idea or fiction” (*eine bloße Idee oder Fiktion*); this should warn us against supposing erroneously that Maimon was content with concepts of this modality. It was Hans Vaihinger who applauded Maimon for having realized that scientific concepts are merely “fictions”. See Vaihinger (1911), *passim*.

that it is an entirely arbitrary assumption; it is introduced here for no other purpose than to exclude the loom inconsistency.

Having rejected all these possibilities, Maimon endorses Kant's construction of compound motions, while rejecting it for forces. The construction of compound motions relies on the fact that the velocity of a body is by definition equivalent to the velocity of the system of reference in the opposite direction: $(+x) \equiv -(-x)$. The relation of "+x" to "-x" was conceptualized by Kant as "real opposition", and this concept enabled him to proceed from the compounding of motions to the compounding of forces. If Maimon is to adopt Kant's construction of compound motions, while rejecting the compounding of forces, he must criticize Kant's notion of "real opposition". And so he does!

4.2. *Maimon's Concept of "Real Opposition"*

Maimon's critique overturns Kant's entire theory of real opposition. He argues that the mutual canceling of the effects of opposite forces is a merely empirical and hence contingent proposition, and therefore that the parallelogram theorem of forces — and with it dynamics and Kant's theory of matter — is also merely empirically founded. There is no "pure physics", and therefore no "proper science", whereby the *claim* of the *Critique of Pure Reason* is subverted. I turn now to his arguments.

Maimon introduces his critique with what, I believe, is the best and most succinct summary of Kant's notion of "real opposition" (*KrU*, VII, 45-46):

The relation of connection is either logical or real. There is a logical and a real accord (*Einhelligkeit*) and opposition; the first is determined by the form, the latter by the content. Concepts are logically in accord when they can be combined in one consciousness; logically opposed when they cannot be combined in one consciousness. They are in reality in accord if, when combined, they enlarge the idea; in reality opposed if, when combined, they cancel each other totally or partially. Logical opposition is called contradiction, the real is called opposition (*Widerstreit*). Two contradictory predicates cannot be attributed to the same object. Two opposing predicates can be attributed of the same object, although their results cancel each other. Logical opposition is signified by A and non A, real opposition by +A and -A. The former but not the latter belongs to logic.

Consider first the distinction between “contradiction” and “real opposition”. Kant argued that a contradiction yields “nothing at all”, an impossible object. Maimon considers the example: “This triangle is right-angled” and “This triangle is not right-angled”. Here, says Maimon, just the predication fails; the triangle itself, i.e., a “geometrical figure enclosed by three straight lines”, is not rendered impossible. This observation is based on the distinction between the opposition of the predicates and the opposition of the copulae. The opposition between the copulae “is” and “is not” cancels the predications. The “consequence” canceled is hence the determination of the triangle’s angle, but this does not affect the definition of the triangle as such. It is, on the contrary, the predication of opposite (not contradictory) predicates which does this. Consider the example: “The triangle is right-angled” and “The triangle is acute-angled”. Both predications succeed because they are not contradictory, but the object thus determined is impossible “since a triangle which is right-angled and acute-angled cannot be a triangle at all” (*KrU*, VII, 48).

Now, it is plain that Maimon’s concept of “real opposition” has little to do with Kant’s. Kant refers to the relation of causal agents, Maimon to predicates. Common to both notions of opposition is merely the incompatibility of the opposites and that it (the incompatibility) is not owing to a contradiction. Kant defined “real opposition” as the relation of “realities”, whereby each cancels the consequence of the other, but not by contradiction. Maimon accepts this definition, but understands it as referring to concepts (not to causal agents) such that “when combined, they cancel each other totally or partially” (whereas Kant believes that the causal agents remain unaffected as potentials). The “consequences” canceled are the determinations of the subject (*KrU*, VII, 48). What would the consequence of real “accord” be? “Objective reality of the augmentation of the concept” (*KrU*, VII, 46) — and this, in Maimon’s view, shows in new consequences which follow from the new concept thus determined (according to the principle of determinability). Thus Maimon accepts the difference between contradiction and real oppositions, the former analytic, the latter synthetic and obtaining between all positive predicates which exclude each other, but not due to a contradiction. Thus motions to East and North are opposites, whereas equal motions to East and West

are not opposites (as in Kant) but contradictories, because "they cancel each other totally" and no motion occurs (see below).

How then will Maimon conceptualize a case in which two opposite forces act on one body and cancel each other's effect?

Maimon considered two cases: firstly, according to the definition of "opposites", as mutually canceling each other's effects; and secondly, before they interact. In the first case, we have a body at rest.²⁸ But then it may be either that the (vector) sum of the acting forces equals zero, or that *no* forces are acting at all. There is no way to distinguish between the two possibilities. Thus, it is exactly when the requirements of "opposition" of forces according to Kant are fulfilled that these opposite forces cannot be distinguished from their contradictory opposite, i.e., that no forces are acting.²⁹ The same holds *a fortiore* for opposite motions. Opposite motions cannot be distinguished from rest, such that predicating of a body opposite motions ascribes to the body both motion and rest and is therefore contradictory. Hence it follows that opposite predicates cannot be predicated of the same subject, just as contradictory predicates cannot. Kant's thesis to the contrary fails (*KrU*, VII, 49-50)³⁰

²⁸ Maimon's argument is confined to opposite and equal forces. If the forces are either not exactly opposite or not of equal absolute magnitude, the argument applies to the relevant components; the other component is not affected at all.

²⁹ "Also durch Voraussetzung einer wechselseitigen Aufhebung der Folgen, wird zugleich die Erkennbarkeit der Beilegung der Gründe aufgehoben" (*KrU*, VII, 49).

³⁰ Maimon discusses the topic in *Giv'at Hammore*, his commentary to Maimonides' *The Guide of the Perplexed*, in the context of the concept of God as *summum optimum*, i.e. as consisting of all perfections in an infinite degree. Maimon comments that the perfections do not contradict each other, since a contradiction consists in the conjunction of an affirmation and a negation of the same proposition. (Maimon inserts here into the Hebrew text a German phrase in brackets: "...eine Realität und ihre entgegengesetzte Negation"). However, although the realities do not contradict each other, they may "contradict each other in the object" (again in German). And the example given is: "Two motions which oppose each other in their inclination (*in ihrer Richtung*) are both a reality, and yet they contradict each other in one object, that is to say, it is impossible that the same body will itself move in two different parts at the same time." (*Giv'at Hammore*, 82)

But Maimon also considers the possibility (as Kant does; see *AA*, II, 176-177 and following note) that all "exclusion" (*Ausschließung*) of different positive predicates in the same subject (say A and B) may be reduced to a contradiction ("*Ausschließung kann auf einen Widerspruch reduziert werden*"): "And therefore when I say this subject is A and it is also B it will be as if I said: this subject is A and it is also not A". (*Giv'at Hammore*, 30; the German quotation is inserted into the Hebrew text.) See also *Giv'at Hammore*, 86-87, 118, 135.

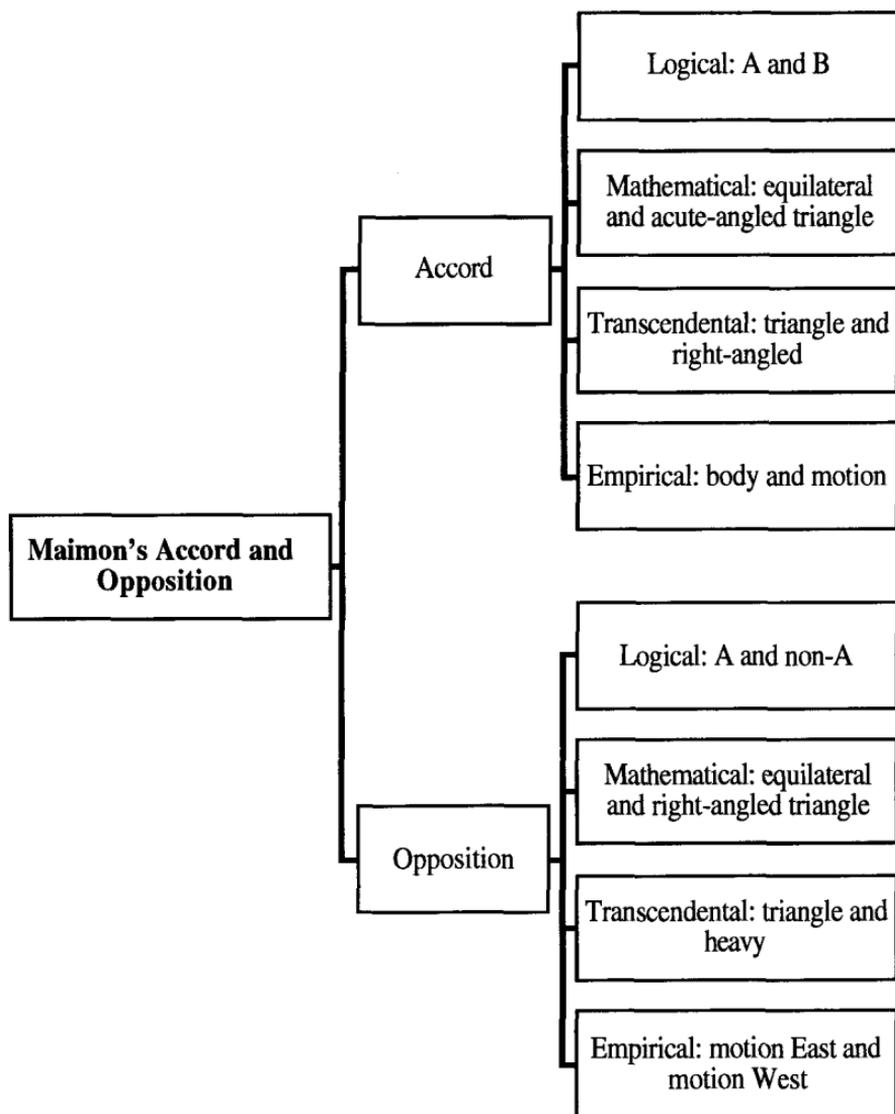
Second, consider opposite forces before they interact, e.g., two bodies approaching a third body from opposite directions. How would we know that these will exert opposite forces? For diametrically opposed forces we could perhaps argue that their opposite *directions* can be recognized in intuition (*KrU*, VII, 47), but this does not suffice to know that the *forces* are opposite, i.e., that they would cancel each other's effect in interaction. Full information of their respective masses, speeds, etc. would not suffice, because we do not yet know on what factors the effects of "force" depend, nor how such agents interact.³¹ Thus the only way to know opposite forces is according to the definition of opposites: opposites are those which cancel each other's effect, e.g., forces which produce no motion when applied to the same body. This involves an experimental procedure, by which we determine which combinations of "forces" produce no motion. The application of the notion of "opposition" is therefore *a posteriori* and not *a priori*. Summarizing his notion of the four kinds of "opposition" (logical, mathematical, transcendental, and empirical — see the table below), Maimon gives as an example for empirical opposition "the motion East and West (if we understand thereby their causes ...)". Empirical opposition, he says, is *a posteriori* and not apodeictic (*KrU*, VII, 50).³²

We can now summarize Maimon's position: Opposite directions in space are recognized in intuition (*KrU*, VII, 47, 50). Speaking of opposite motions of the same body, i.e., motions with equal speeds in opposite directions, is contradictory, because no real motion occurs, and the body is said to simultaneously move and not move. But how do we know what forces do not produce motion when applied to the same body in opposite directions? How do we know that they cancel each other's effect rather than adding up like energies? Or why two balls colliding diametrically do not

³¹ We could of course argue that complete symmetry of both forces would ensure their mutual cancelation. But this presupposes that we already know what the decisive factors are. See Ernst Mach's (1960) discussion (*ibid.*, 11-32), of such attempts to derive the equilibrium of a lever.

³² Maimon's formulation is very clumsy, but unequivocal in the context of his discussion: "*Die empirische Einhelligkeit, z.B. Körper und Bewegung, Widerstreit, Bewegung nach Morgen und nach Abend (wenn darunter die entgegengesetzten Gründe ["Gründe" was Kant's term for "forces"] verstanden werden), die [the motion to East or West, the directions that is] aber bloß in der Anschauung erkennbar ist* (*KrU*, VII, 50).

subsequently move in a third direction? Maimon gives a clear answer: that we know it by experience, i.e., *a posteriori*, not *a priori*. The parallelogram rule for forces is hence an empirical law. It was almost a century before this point was forcefully reasserted in the first edition (1883) of Ernst Mach's *The Science of Mechanics*.³³



³³ See Mach (1960), Ch. 1, "The Development of the Principles of Statics", # III, "The Principle of the Composition of Forces", 44-59.

4.3. *Maimon: The Subjunctive Mood of Metaphysics*

It is at this point that the difference between Maimon and Kant can be specified precisely. Both Kant and Maimon demand the construction of concepts in general and of “compound motion” (velocity) in particular. Kant, however, used his construction of compound motion as a basis for constructing the concepts “compound force” and “matter”. He applied the geometrical construction and the notion of “opposition” to constructing matter out of forces of repulsion and attraction. He tacitly presupposed that “force” conforms to the same rules of addition as motions. Since compound motion was constructed on the basis of geometry alone, its extension to “force” entails that the compounding of forces is a necessary truth. The link between compound motion and compound force was the notion of “real opposition”. “Real opposition” refers to the effect of a force on an opposite motion, and erroneously transported the relations between motions to forces. Thus the difference between “motions” (velocities) and “forces” was blurred, and with it the difference between mathematics and physics, between *a priori* and *a posteriori* knowledge.

Maimon’s program was to render the concept “compound motion” intelligible (it initially seemed *undenkbar*; *Pemberton*, IV, 554), i.e., to remove the contradiction implied by it. This was done by construction. As Maimon said, he adopted Kant’s construction, but he saw a different reason for undertaking it. For Maimon, it was not the task of philosophy to introduce the parallelogram rule for the compounding of forces. This is an empirical theorem and its justification is the task of physics. The philosopher is concerned with showing that the concept is possible, not that it is true. It is noteworthy that Maimon maintained this position throughout his career, from his first book to his last.³⁴

³⁴ He discusses the concept of opposition in his first book, *Versuch über die Transscendentalphilosophie* (1790), in his commentary to Maimonides’ *The Guide of the Perplexed* (1791; *Giv’at Hammore*, 87), in his edition of *Pemberton* (1793), in his essay *Über die Progressen* (1793), and finally in his last book, in *Kritische Untersuchungen* (1797).

In the *Tr* (II, 130n.), Maimon first formulated his criticism of Kant’s “real opposition”, which I quoted from the *KrU*: “*Die entgegengesetzte Richtung in der Bewegung zweier Körper ist bloß verschieden, nicht entgegengesetzt; weil sie in verschiedenen Objekten einander nicht heben, so lange nämlich beide ihre Bewegung behalten; stoßen sie aber auf einander: so daß ihre Bewegung aufhört, so ist hier abermals keine*

The philosophical consequences of this critique are manifold:

Since the theorem of compounding forces is applied as a means of reducing complex reality to the simple laws of mechanics, it also renders all knowledge produced with its help contingent and fallible. This consequence was cited by Maimon.³⁵

I deem this view to be a usually neglected version of Maimon's Skepticism. The version normally discussed concerns the *quid juris* question of the applicability of *a priori* concepts of understanding to *a posteriori* sensibility. The version discussed here concerns the *quid facti* question. It does not doubt that nature is governed by laws (although it does not explicitly maintain that it is), but asks whether we can know *a priori* which of the many possible laws of nature are valid in our world (cf. II, 186-187; IV, 72-73; V, 477-479; VII, 55-59).³⁶ Maimon's answer is that our knowledge is based on

Gegensetzung, denn es ist bloß Negation mit Negation."

³⁵ Very much in agreement with this empiricist stance, Maimon also presents Newton as an inductive scientist opposing rationalism. "When the English sage, Newton, sensed the deficiency of Descartes' method, he resolved to abandon rational concepts entirely and to presuppose in his investigation in physics nothing but concepts taken from experience of existing things. And this is his procedure: He first looks at the specific operations of nature and abstracts the general from the particular. Then he extends the general beyond the limits of investigation (*Er dehnt das Allgemeine über die Grenzen der Beobachtung aus* — the German is inserted by Maimon into the Hebrew text — G.F.) and continues [the investigation] of the particular which is not known from experience." — And so on. (*Giv'at Hammore*, Synopsis of the History of Philosophy, 15)

See also *op. cit.*, p. 52. Maimon discusses here the discovery of the law of universal gravity in inductive terms. He contrasts the *a posteriori*, inductive method of natural science with the *a priori* method of metaphysics. Natural science, therefore, cannot guarantee the universal validity of its propositions. "However, in natural science (*hokhma*) we must be content with this method since we have no better in this science."

³⁶ The skeptic position in *Über die Progressen* is less radical than in the notes to Pemberton's book. In *Über die Progressen* (IV, 33), Maimon considers the possibility that the ratio of the projecting force and of gravity would be such that a projectile would follow a hyperbola, rather than a parabola. But the existence of a general law is not doubted. In his notes to Pemberton's book and elsewhere, the contingency of the parallelogram rule is stressed. Since this theorem is involved in every investigation in mechanics, Maimon's position renders all knowledge in mechanics contingent. It may well be the case that Maimon radicalized his skeptical position with time. Both *Über die Progressen* and Pemberton appeared in 1793; the former, however, is earlier. Its title, *Über die Progressen der Philosophie veranlaßt durch die Preisfrage der königlichen Akademie zu Berlin für das Jahr 1792: Was hat die Metaphysik seit Leibniz und Wolf für Progressen gemacht?* is misleading. The *Preisfrage* was for 1791 (not 1792!), and Maimon states (IV, 3) that a friend alerted him about eight days before the date set by the academy.

experience, i.e., on induction, and that there may be more or less probable knowledge of objective reality, but not apodeictic knowledge. This is the gist of his “empirical skepticism”, whereby he parts ways with a leading trend of continental philosophies of science and joins the English empiricist school. At the same time, however, he upholds an unattainable rationalist ideal of apodeictic knowledge.³⁷ His edition of Pemberton’s book is an excellent example of this dual stance: The book itself is written in the empiricist tradition,³⁸ whereas extensive sections of the notes are taken from Kant’s *Metaphysical Foundations of Natural Science*, which is certainly the most ambitious rationalist attempt to ground an apodeictic, rationalist “pure physics”. Maimon’s commentaries to Pemberton and Kant share (not mix!) both traditions.³⁹

Since the date was the end of 1791, the paper was probably written in December of that year. The introduction to Pemberton’s book is signed: “24. März 1793” (IV, 546). I am indebted to Dr. Wolfgang Knobloch of the Berlin-Brandenburgische Akademie der Wissenschaften for this information.

³⁷ On this topic, see Oded Schechter’s contribution to this volume.

³⁸ In the preface, Pemberton first gives his condensed version of Bacon’s methodology and his theory of *idola* (Pemberton (1728), 5-13), and then warns against “conjectures” in philosophy (*ibid.*, 13-14). The preface ends with Pemberton’s summary of Newton’s *Regulae philosophandi*. Pemberton strongly emphasizes the empirical certainty of Newton’s theory, but clearly distinguishes it from apodeictic (mathematical) knowledge (# 20): “The proofs in natural philosophy cannot be so absolutely conclusive, as in the mathematics. For the subjects of that science are purely the ideas of our own minds [...] so that the mind can have a full and adequate knowledge of its own ideas, and the reasoning in geometry can be rendered perfect. But in natural knowledge the subject of our contemplation is without us, and not so compleatly to be known: therefore our method of arguing must fall a little short of absolute perfection” (*ibid.*, 23).

³⁹ It can be asked whether being skeptical about the rationalist grounding of science deserves the title “skepticism”. It seems to me that we need not reserve the term for a specific position concerning human knowledge, but rather apply it to any questioning of the reliability of knowledge claims. Understood as such, the nature of skepticism depends on the knowledge claim being advanced. In the framework of rationalist philosophy, Maimon’s empiricist position concerning the foundations of physics certainly deserves the title “skepticism”, which (together with “rational dogmatism”) he also chose as a descriptive tag for his doctrine.

The difference between these two kinds of skepticism has another implication, which can only be touched upon here. It seems to me that the burden of proof, as well, is not necessarily allocated equally to both versions of skepticism. It can be argued that in the first, which casts in doubt the very law-governedness of the physical world, it is the skeptic who has to shoulder the burden of proof; in the second version, by contrast, which accepts the law-governedness of the physical world and yet questions the validity (and the specific kind of validity)

Sharing both traditions means that Maimon did not give up Kant's program in the *Metaphysical Foundations of Natural Science*, i.e., to lay apodeictic foundations to science. It is rather that he radicalizes the program to encompass all knowledge. Real knowledge for Maimon is synthetic and *a priori*, produced in conformity with his principle of determinability. This is his rationalist program, and it exceeds Kant's by far.

On the other hand, Maimon shares the empiricist tradition in that he considers all knowledge of material objects to be *a posteriori* and fallible. It follows that the truth of all philosophical justification of this knowledge is contingent (also) upon the (problematic) truth of this empirical knowledge, i.e., on the condition that the *quid facti* question can be answered in the affirmative. Moreover, Maimon argues that the answer to both questions — *quid juris* and *quid facti* alike — requires infinite understanding; as humans we will never know the answer. The philosophy of finite minds will thus necessarily remain hypothetical.

Maimon (IV, 211) saw very clearly that his skepticism was “new” in that it argued from *within* the Kantian assumptions:

I have brought a new kind of Skepticism on its way which Kant (who proves the reality of the principles of the critical philosophy only as conditions of the possibility of its application to experience, but presupposes this applicability only problematically) has not considered, and which I present as the stumbling block of all philosophy, even the critical one, in the question: *quid facti*.

claimed for the present laws and theories, the burden of proof is on the defender of this knowledge claim. This second kind of skeptic accepts the answers provided to the skeptic of the first kind, and yet appeals to the history of science, which shows the recurrent falsification of scientific theories. Be that as it may, in the final paragraph of the *Progressen der Philosophie* Maimon certainly argues for this second kind of skepticism, and not for the first.

MAIMON'S "QUID FACTI" ARGUMENT

YARON SENDEROWICZ

Introduction

Maimon's "quid facti" argument is traditionally regarded as his most serious objection to Kant's transcendental philosophy, its conclusion being that Kant's theory of experience is inadvertently compatible with Hume's skepticism. He esteems Kant's painstaking analysis of the concept of experience as one of the supreme achievements of the human mind, comparable to Euclid's.¹ Nevertheless, Kant's response to skepticism is defective, in his view. It presupposes *as a fact* what has to be proved: namely, *the fact of scientific experience*. Since, as Maimon engages to show, there are no compelling reasons obliging us to accept this as a fact, the truth of skepticism is inevitable, and Kant's reply to Hume begs the question.²

In light of the subsequent development of science, Maimon's objection seems attractive and promising. The discovery of non-Euclidean geometry in the nineteenth century, new perspectives in physics in the twentieth century, and numerous other innovations have shown that some of the concepts and principles that Kant deemed *necessary for the possibility of experience* are not really necessary. It is thus natural to view Maimon as a thinker who broke the mold of tradition, enabling his successors to recognize the contingency of our concepts of knowledge and objectivity. Nevertheless, I believe this response is overhasty and insensitive to the subtleties of the debate between Kant and Maimon. Most importantly, the "quid facti" argument does not appeal to any evidence drawn from the physical or exact sciences. That is to say, Maimon does not

¹ See, for example, *Tr*, II, 8-9.

² As Beiser remarks (1987), 287, Maimon's interpreters disagree as to whether Maimon's final position is skeptical or rather represents a middle path between Kantianism and skepticism. Kuntze (1912a) and Erdmann (1977) think that skepticism is his final position; Cassirer (1974) maintains that he adopts the middle path.

present any *scientific refutation* of Kant's concept of objectivity. In his first book (*Tr*, II, 186), he presents his argument as follows:

Herr Kant assumes as a fact beyond doubt that there are judgments of experience (which express necessity) and then he proves their objective validity by showing, that without them experience would be impossible; experience is possible since it has reality in accordance with his assumption and therefore these concepts possess objective reality. However, I doubt this fact itself, that is, *the fact that there are empirical judgments* and for this reason I am unable to prove their objective validity in this manner, but only the possibility of their objective validity.³

In a later book (*Strf*, IV, 225-6, 226n), the same idea is formulated slightly differently:

Kant posits at the very outset experience with respect to objects (i.e. the use of synthetic judgments which express necessity and universal validity) and demonstrates the reality of pure concepts and judgments in that they are the conditions of experience. Their reality is then hypothetical; so that if with Hume I deny the fact that we have judgments of experience which express necessity and universal validity and explain these as the operation of association of concepts, then I cannot concede that there is a science of nature, strictly speaking. Our knowledge of nature is without certainty, and consists only of hypotheses and assumptions.⁴

Maimon's claim is not that Kant's conceptual *scheme of objectivity* is refutable, i.e., that there are other, conceivably true, schemes of objectivity, but rather that the concepts of *objective experience* and *objective judgment* might prove empty, that, despite all that Kant has proven, it is still possible that any experience we believe to be objective is merely a dream, an association of ideas, a figment of the imagination.

My intention at present is neither to vindicate Kant's position nor to refute Maimon's; it is rather to reveal the sense in which the "quid facti" argument is ill-founded as an internal criticism of Kant's transcendentalism.⁵ Its aim is to expose a fundamental

³ Bergman's translation (1967), 80.

⁴ *Ibid.*, 81.

⁵ According to Franks (see present volume), the dialectic between Maimon and Kant is a clash between different programs with different presuppositions. I agree in general with this claim. We both disagree with Freudenthal (see present volume) on this issue. In his view, Maimon successfully undermined Kant's project and submitted an alternative that prevailed over it. I question this

inconsistency in Kant's theory of experience, but, as I plan to demonstrate, it fails in its assay. Recognizing the deficiency of the "quid facti" argument leaves us with another question: What significance can we assign to the web of issues involved in the debate between Kant and Maimon if we reconsider them in the light of later developments in science? This question will not be explored here. It is my conviction that it has no simple answer; and the reasons I submit to demonstrate the deficiency of Maimon's argument will, I believe, provide some justification for this view.

In the first part of this paper, I will present some of the claims integral to Kant's response to skepticism that are relevant to Maimon's "quid facti" argument. My interpretation is unusual, albeit not completely new; it is, in my opinion, the one that does more justice to Kant's position than any other known to me, particularly in consideration of objections such as Maimon's. In the second part, I will present the "quid facti" argument itself and appraise it in terms of Kant's claims.

Certainty, Necessity and the a priori

Kant's most explicit definition of *a priori* knowledge appears in the introduction to his *Critique of Pure Reason* (B 4): "First, then, if we have a proposition [*Satz*] which in being thought is thought as necessary, it is an *a priori* judgment." The term "*a priori*" qualifies a judgment; it is a judgment which contains a *proposition thought as necessary*. The *necessity* of the proposition is a *criterion* of an *a priori* judgment.

In the same context we also find the following sentence (*CpR*, B 4): "If, then a judgment is thought with strict universality, that is in such a manner that no exception is allowed as possible, it is not derived from experience, but is valid absolutely *a priori*". An *a priori* judgment is one that is thought with strict universality. No

contention in my paper. Frank argues that the differences between Kant and Maimon are based on their divergent conceptions of intelligibility, but he believes that the "quid facti" objection does raise some significant difficulties relevant to the Kantian program. I disagree with him on this issue. In my view, the differences between Kant's and Maimon's conceptions of intelligibility are grounded on their disparate epistemologies, as well as on their related response to skepticism. The "quid facti" objection loses its apparent force when viewed from this perspective.

exception is allowed as possible. The "strict universality" of an *a priori* judgment, the fact that "no exception is allowed as possible", is responsible for the *kind of validity* that an *a priori* judgment has. Validity is an epistemic term, and necessity is a semantic term. How are the epistemic mode of an *a priori* judgment and the modal character of its content related to each other?

For the sake of clarification, let me remind the reader of Kripke's distinction (1980) between epistemic modalities and metaphysical modalities.⁶ According to Kripke, the content of some *a priori* judgments is a contingent proposition, and the content of some *a posteriori* judgments is a necessary proposition. Applying this distinction, we can say that if one knows a contingent proposition independently of experience, one has knowledge of a contingent truth without being dependent on experience. Nevertheless, such a judgment would not qualify as an *a priori* judgment for Kant; it fails to satisfy the condition of "necessity".

"Certainty" is an epistemic property. It characterizes the kind of justification one has for the proposition comprising the content of one's belief. If a belief is endowed with certainty, it is at least indubitable. If I think that I exist, I cannot fail to know that I exist. My belief is indubitable. If I feel pain, I cannot fail to know that I do so.⁷ But the epistemic modality of these beliefs, the fact that they are certain, does not indicate the semantic modality of their propositional content. A belief can be certain despite its content being a contingent proposition. The fact that I exist is contingent, although my thought that I exist is certain whenever I entertain this thought.

Classifying a judgment as *a priori* implies that the justification one has for it does not depend on experience. My next question is: How can one describe the relationship between the non-experiential nature of the justifying grounds of an *a priori* judgment and the necessity of the proposition expressed in it? It is clear that if

⁶ Kant, to be sure, was unaware of Kripke's distinction. Moreover, as some have claimed (e.g., Kitcher [1982]), Kripke's distinction is incompatible with Kant's position. Nevertheless, it can help us apprehend the meaning of Kant's *a priori*.

⁷ As Alston (1971) shows, although "I exist" and "I feel pain" are both epistemically certain, they differ in terms of the way in which the conditions of knowledge are satisfied. I would claim that neither comprises an instance of *a priori* knowledge in the Kantian sense.

the only criterion classifying a judgment as *a priori* is the non-experiential nature of its justifying grounds, it is possible that the content of some *a priori* judgments would comprise a *contingent proposition*. For example, if we are endowed with an *innate capacity* to make judgments whose content is a *contingent* proposition, and we have non-experiential reasons that justify us in accepting the reliability of this capacity, then the grounds we have for these propositions are non-experiential and the propositions themselves are contingent. Identifying the class of *a priori* judgments with the class of judgments that are justified non-experientially is, thus, incompatible with Kant's explicit definition.

As I have already stated, Kant thought that *a priori* judgments are not derived from experience. However, he does not regard the non-experiential character as the *criterion* of *a priori* knowledge. The property of not being derived from experience *results* from the other criteria, namely "necessity" and "strict universality". In an *a priori* judgment a proposition is *recognized* as necessary; it is a judgment that allows of no exception:

For geometrical propositions are one and all apodeictic, that is, are bound up with *the consciousness of their necessity*; for instance that space has only three dimensions. Such propositions cannot be empirical or, in other words, judgments of experience, nor can they be derived from any such judgments .

(*CpR*, B 41; my italics).⁸

Since it is impossible to justify a proposition endowed with the consciousness of necessity by appealing to experiential evidence, *a priori* judgments are not empirical judgments.

I claim that a Kantian *a priori* judgment is a judgment in which one is *certain* of the *necessity* of the proposition comprising its content.⁹ The indubitability of an *a priori* judgment can be clarified in

⁸ In this passage Kant's main concern is with apodeictic propositions. However, the relevant property discussed here, consciousness of necessity, is, as stated above, a general index of *a priori* knowledge. See also Note 15.

⁹ Chisholm's account of *a priori* knowledge (1989, Chapter 4) is closer to Kant's than that of any other philosopher known to me. He bases his account of *a priori knowledge* on the concept of an axiom. The definition of an axiom is as follows (ibid., 28): "h is an axiom=Df h is necessarily such (i) it is true and (ii) for every S [subject] if S accepts h, then h is certain for S". However, Chisholm differs from Kant in that the above definition lacks a clear distinction between the possible types of the propositions accepted. It is not sensitive to the

the following manner: Suppose someone wishes to preserve both the necessity of an *a priori* judgment and the possibility of doubt. For that purpose, she might wish to claim that the concept "*a priori* judgment" merely requires that the *belief* one forms in making it is that the proposition comprising the belief's content is necessarily true. However, she also wishes to deny that the concept of an *a priori* judgment requires one to be *certain* of the truth of the proposition one accepts in making that judgment. In an *a priori* judgment — so might the argument go — a person, indeed, accepts a proposition she takes to be *necessarily* true or *necessarily* false. However, she might accept such a proposition, and yet deny that she is *certain* of its truth or falsity without being inconsistent.

It is indeed true that the *general* concept of epistemic justification allows a person to be justified in accepting a certain proposition, i.e., to have reasons that justify her accepting it, although the proposition itself is false.¹⁰ When a person accepts a proposition in such a way, she is conscious of possible reasons that are incompatible with its truth. Nevertheless, the claim that there is a gap between *accepting* a proposition as being *necessary* and *being certain* that the proposition in question is true implies inconsistency. If a person accepts a proposition as being necessary and yet denies that she is certain of its truth, she must be conscious of *some possible grounds* that are incompatible with the truth of the proposition she accepts — conditions that she *believes* are not instantiated, but nevertheless could be instantiated, or, even worse, are instantiated independently of the reasons she possesses. However, one cannot both *accept* a proposition as *necessary*, as one that allows of no exception, and entertain the claim that there are conceivable grounds for the possibility of its negation, i.e., for being mistaken in accepting it. For if a certain proposition is necessarily true, its negation is not possible under any interpretation of the term "necessity". And if one accepts that a certain proposition is necessarily true in such a manner "that no exception is allowed as possible", one cannot both *accept* that it is necessarily true and that

difference between: "I exist" and "2+2=4", that is to say, between judgments that are "empirically certain" (*CpR*, B 274) and *a priori* judgments.

¹⁰ The fact that a certain proposition might be both epistemically justified and false is one of the sources of the Gettier problem (see Gettier [1963]).

it might be false without being implicated in a contradiction. At best, one can accept a proposition as being *possibly* necessary, while admitting that there might be conceivable grounds for its falsity. But, in that case, one will not be accepting a proposition *as a necessary truth*, i.e., *one will not be conscious of its necessity*.

It is important to stress at this point that there is no difference for Kant between analytic and synthetic *a priori* judgments, nor between different types of synthetic *a priori* judgments *in terms of apriority*. Analytic judgments, judgments of mathematics, and the synthetic *a priori* principle of the understanding do not differ in terms of what “*a priori*” means. The fact that this conclusion seems strange is mainly because it allows no room for skepticism about *a priori* knowledge.

The Significance of Skepticism

The conclusion of the previous section seems to be incompatible with the importance Kant ascribes to Hume’s skeptical challenge. In what sense did Hume arouse Kant from his dogmatic slumber, if *a priori* judgments are indubitable? To be sure, the above reconstruction of Kant’s concept of *a priori* knowledge raises a major exegetical difficulty. It conflicts with the common interpretation of the significance Kant imputed to Hume’s skepticism: namely, that he thought that it was important mainly due to Hume’s supposed discovery that some of our claims to *a priori* knowledge might be *false*.¹¹ However, there is copious textual evidence at variance with this interpretation.¹² Kant never granted the possibility that *a priori* judgments might be false. Thus the importance of Hume’s skepticism lies elsewhere.

It should be recalled that, according to Kant, Hume’s skeptical challenge is directed at a very specific type of *synthetic a priori*

¹¹ Many interpreters think (wrongly, in my opinion) that Kant’s intention in the Transcendental Deduction is to prove that the categories of the understanding *are true* about the objects of experience. Such an approach is found in interpreters as different as Allison (1983), Guyer (1987; 1992), Strawson (1966), and Bergman (1967), and it is close to Maimon’s reading of Kant. A different approach to Kant’s transcendental deduction, one that is more sensitive to the characteristics of his concept of *a priori* knowledge, is found in Heidegger (1990; 1997), Ameriks (1978), and Engstrom (1994).

¹² A full justification of this claim exceeds the bounds of the present paper. For more details, see Senderowicz (2000, and forthcoming).

judgment. Kant regarded his transcendental philosophy as one that seeks an intermediary position between skepticism and dogmatism. As he affirmed in the *Prolegomena* and elsewhere, skepticism and dogmatism share the same mistake — both misconstrue the nature and importance of synthetic *a priori* judgments. Kant's key idea is that the very same distinction upon which the concept of a synthetic *a priori* judgment is founded is responsible for the dogmatic exercise of reason and for skepticism about such a judgment.

Basic to Kant's concept of synthetic judgments is the crucial role intuition plays within it. A synthetic judgment is one in which the predicate concept is not included in the subject concept. It is also a judgment in which a *concept* is related to *intuitions*.¹³

In the *Critique of Pure Reason* Kant defines an intuition as an immediate representation of an object (*CpR*, A 320, B 33). By contrast, no concept is immediately related to objects (*CpR*, A 68, B 93). In his lectures on logic, Kant adds the following trait to the distinction between concepts and intuitions (*AA*, IX, 91): an intuition is a singular representation of an object; concepts are general representations. Objects are *given* to the mind only by means of intuitions — of singular and immediate representations. No object is given to the mind by means of concepts alone. Objects are *thought* by means of concepts.

Intuition plays within a synthetic judgment two distinct roles, both of which are related to two properties of a synthetic judgment. The first is that the concepts thought in a synthetic judgment are "not contained in each other" (*CpR*, A 6/B 8). The second is that synthetic judgments are *about objects*; they do not abstract from a relation to an object. Intuitions provide the *third thing* upon which the relation between the subject and the predicate in a synthetic judgment can be based. Without this "third thing", it would be impossible to think that the predicate is related to the subject whilst not contained within it.¹⁴

¹³ Kant's concept of a synthetic judgment possesses two distinct characteristics. According to Gram (1968), one can find in Kant two incompatible distinctions between analytic and synthetic judgments. As I have argued elsewhere (Sendrowicz [1998]), these ostensible distinctions are, in actuality, two aspects of one distinction. On this subject, see also Allison (1983; 1985).

¹⁴ Kant (1950), § 7 (*AA*, IV, 281).

An intuition is a representational entity that provides the singularity condition. It stands for our capacity to represent an object, as distinct from any other object. It is non-conceptual in the sense that it is not a general representation. This is the most important topic in Kant's criticism of Leibniz in the "aesthetic" and the "amphiboly".¹⁵ The only possible types of intuitions for humans are spatial and temporal sensible intuitions.

Within Kant's theory, the need of the "third thing" as a condition of the unity of a synthetic judgment and the need of a singular representation as a condition of a possible relation to an object are two distinct — though not independent — aspects of a synthetic judgment. The underlying idea is that the *unity* of a synthetic judgment is contingent upon the selfsame condition that provides the judgment with *a relation to an object*.

In the open sections of the Transcendental Deduction, Kant submits two different reasons for the need of such a deduction. The first is that the categories have an innate tendency to reach beyond the realm of sensible intuition (*CpR*, B 120-1). This tendency gives rise to the dogmatic exercise of reason. The categories do not originate in experience; they are *intellectual* concepts and not *sensible* representations. Thus, their application to *non-sensible objects* seems conceivable.

¹⁵ *CpR*, B 60-1, *CpR*, B 319-320.

As I claimed earlier, consciousness of necessity is part of the concept of a *priori* knowledge. This is clearly stated in *CpR*, B 41, quoted above. Nevertheless, Kant's concern in this passage is with apodeictic propositions. In his conception, the apodeictic principles of knowledge are the mathematical principles (*CpR*, A 160, B 199), which are *intuitively* certain. There is a difference between apodeictic and dynamical principles, e.g., the principle of causality, in terms of the *kind of certainty* ascribable to them, but *not* in that only one set of principles (the mathematical, the apodeictic) is *certain*, whilst the other is not. The following passage states this clearly (*CpR*, A 161, B 199-200): "The principles of mathematical employment will therefore be unconditionally necessary, that is apodeictic. Those of dynamical employment will also indeed possess the character of a priori necessity, but only under the condition of empirical thought in some experience, therefore only mediately and indirectly. Notwithstanding *their undoubted certainty* throughout experience, they will not contain that immediate evidence which is peculiar to the former. But of this we shall be better able to judge at the conclusion of this system of principles". The *a priori necessity* of both sets of principles implies that they possess the character of undoubted certainty. Both sets are certain, although one is "intuitively certain", the other "mediately certain". The need for a "transcendental deduction" arises mainly with regard to those principles and concepts that are "mediately certain".

Furthermore, Kant claims, it is not intuitively certain that sensible phenomena necessarily fall under the categories. So, for example, the concepts of space and time qua forms of intuition are necessarily presupposed by the concept of sensual appearance. If something appears to us, it appears in space and time. However, concepts such as "cause" are not intuitively certain. This means that an appearance is conceivable even if it does not instantiate the concepts of the understanding (*CpR*, A 89-90/ B 122):

The categories of understanding, on the other hand, do not represent the conditions under which objects are given in intuition. Objects may, therefore, appear to us without their being under the necessity of being related to the functions of understanding; and understanding need not, therefore, contain their *a priori* conditions. Thus a difficulty such as we did not meet with in the field of sensibility is here presented, namely, how *subjective conditions of thought can have objective validity*, that is, can furnish conditions of the possibility of all knowledge of objects. For appearances can certainly be given in intuition independently of functions of the understanding.

Given the above problems, one has to confront the following question: Since *a priori* concepts and synthetic *a priori* judgments allow of no exception, how can one be conscious of the necessity of the claim that "every thing that begins to exist must have a cause" while allowing appearances to be *conceivable* independently of the functions of the understanding? Kant thought that Hume's skepticism was a superb philosophical achievement mainly because it revealed the above incompatibility. Hume had *uncovered the tension* between what is expressed in some synthetic *a priori* judgments and what is conceivable regarding sensible appearances. However, it is important to note that the problem, as Kant construed it, did not relate to the necessity and general validity of the *a priori* principles, but rather to the conditions under which they could be regarded as having these properties.¹⁶ The truth of skepticism resided in the fact that these conditions were not "a priori manifest", but were concealed in the depths of our mind.

In another famous passage in the *Critique* (*CpR*, B 127-8), Kant discards Hume's presentation of the problem he had himself exposed, particularly his purported "empirical deduction":

¹⁶ As Kant says elsewhere (*CpR*, B 167-8), "mere subjective necessity" is incompatible with the necessity that belongs essentially to the categories.

The illustrious Locke, failing to take account of these considerations, and meeting with pure concepts of the understanding in experience, deduced them also from experience, and yet proceeded so *inconsequently* that he attempted with their aid to obtain knowledge which far transcends all limits of experience. David Hume recognized that, in order to be able to do this, it was necessary that these concepts should have an *a priori* origin. But since he could not explain how it can be possible that the understanding must think concepts, which are not in themselves connected in the understanding, as being necessarily connected in the object, and since it never occurred to him that the understanding might itself, perhaps, through these concepts, be the author of the experience in which its objects are found, he was constrained to derive them from experience, namely, from a subjective necessity (that is, from custom), which arises from repeated association in experience, and which comes mistakenly to be regarded as objective. But from these premises he argued quite consistently. It is impossible, he declared, with these concepts and the principles to which they give rise, to pass beyond the limits of experience.

Now this *empirical* derivation, in which both philosophers agree, cannot be reconciled with the scientific *a priori* knowledge which we do actually possess, namely, pure *mathematics and the general science of nature*, and this fact therefore suffices to disprove such derivation.

This passage contains the seeds of the position to which Maimon's "quid facti" argument responded. There are two facts mentioned here: that of *a priori* knowledge and that of science. They are related to each other in various ways, and their interrelations lie at the root of the two mistakes Hume commits, in Kant's view. The first is that Hume provides a spurious explanation of the "fact" of synthetic *a priori* knowledge. He *explains it away* by reducing it to mere habit or custom.¹⁷ Hume's explanation is also incompatible

¹⁷ It should be recalled that, according to Kant, there are no mathematical objects (*CpR*, B 147-8): "Mathematical concepts are not, therefore, by themselves knowledge, except on the supposition that there are things which allow of being presented to us only in accordance with the form of that pure sensible intuition. Now *things in space and time* are given only in so far as they are perceptions (that is, representations accompanied by sensation) — therefore only through empirical representation. Consequently, the pure concepts of understanding, even when they are applied to a priori intuitions, as in mathematics, yield knowledge only in so far as these intuitions — and therefore indirectly by their means the pure concepts also-can be applied to empirical intuitions. [...] Our conclusion is therefore this: the categories, as yielding knowledge of *things*, have no kind of application, save only in regard to things which may be objects of possible experience."

with the "fact" of the sciences based on *a priori* knowledge. If, therefore, Hume is right in claiming that the only possible account of (presumed) *a priori* knowledge is his own, the reality of scientific knowledge is lost. Allow me to remind the reader that this is also Maimon's contention.

Why, however, does Kant refuse to accept it? The reason, I think, lies in the second mistake he ascribes to Hume, namely, his failure to realize that his skepticism is founded on a philosophical theory *that has an alternative*. Why does Hume suppose that the theory to which he is committed is endowed with such absolute necessity that one is obliged to retract any other claim to scientific knowledge? Kant's answer is that Hume adheres to this theory of the mind because, like others, he is unaware of the (Kantian) alternative. Hume, however, in contrast to the others, has shown us why one should search for such an alternative. In other words, the significance of skepticism lies not in what its advocate states explicitly, but rather in what is revealed by the "fact" of skepticism. The skeptic reveals a tension between claims to *a priori* knowledge and the nature of sensible appearances. He also reveals (albeit inadvertently) that one cannot resolve this tension within the bounds of his own position. Kant argues that the "fact of science" or the "fact of experience" serves as an incentive to probe deeper into our mind *for a different account of the relation between thought and object — one that does justice to these facts*. Kant's "Copernican Revolution" is such a philosophical alternative.

Kant's Solution

A full interpretation of Kant's answer to Hume exceeds the limits of the present paper. Nevertheless, some of his key ideas — those that are relevant to his debate with Maimon — can be recounted:

Kant's initial step in resolving the tension revealed by Hume was his realization that appearances are conceivable without the categories in the sense that they are *imaginable*. Thus, a response to skepticism must show why *being conceivable* in the sense of *being imaginable* is not equivalent to being *really possible*.

As Kant observes, appearances are mind-dependent no less than concepts. The main question one has to confront is: *What are the objects for which appearances stand?* Two possibilities are incompatible

with *a priori* knowledge. The first is that of regarding appearances themselves *as objects*, i.e., as standing for themselves, whereby mere imaginability would imply real possibility. But, as Kant insists, this is an incoherent possibility. For an appearance qua appearance cannot be distinguished from the act of apprehending it. Hence, no distinction between a conscious state and its object, no relation of consciousness of objects to objects of consciousness, is possible in this case. Nevertheless, the distinction between an act of apprehension and its object is demanded by the fact that an object is subject to many different acts of predication, that an object is that “in the concept of which a manifold of a given intuition is united” (*CpR*, B 137).

The second possibility incompatible with *a priori* knowledge is that appearances stand for non-sensible objects, i.e., objects that are fully determined independently of the human capacity to make judgments about them. This was the most vexing possibility, and Kant thought that skepticism was committed to it. He is ready to admit that appearances have indeed noumenal grounds. But he denies the claim that fully determined objects that are not necessarily related to our capacity to make judgments are such noumenal grounds. Denying the “real possibility” of *non-sensible objects* of thought (to which one is consciously related) is rendered possible by Kant’s distinction between concepts and intuitions. A supposed epistemic access to such “pure” objects conflicts with the conjunction of the following Kantian claims: (a) one cannot be related to objects by means of concepts alone; and (b) the only kind of intuition available to human beings is sensible intuition.

In other words, as Kant realized, the difficulty from which the skeptical problem arose was not different from that underlying the possibility of judgment: the relation of the intellectual to the sensible. The first step towards solving the difficulty posed by skepticism was to explain why the distinction between intellectual concepts and sensible intuitions is not one between two representational capacities related to two respective sets of determinate objects. The determinate objects we can think about, those determined by thought, are the objects we can represent in our sensible intuitions. This is clearly stated in the following passage (*CpR*, B 309):

The categories accordingly extend further than sensible intuition, since they think objects in general, without regard to the special mode (the sensibility) in which they may be given. *But they do not thereby determine a greater sphere of objects.* For we cannot assume that such objects can be given, without presupposing the possibility of another kind of intuition than the sensible; and we are by no means justified in so doing.

The fact that the categories are intellectual concepts does not mean that they determine a *greater sphere of objects*.

The second step was to explain why no relation to a determinate object is possible by means of intuitions alone. Kant rejects the assumption that objects are given to us as fully determined in intuition independently of our capacity to make judgments (*CpR*, A 258/B 304):

Understanding and sensibility, with us, can determine objects only when they are employed in conjunction. When we separate them, we have intuitions without concepts, or concepts without intuitions, in both cases, representations which we are not in a position to apply to any determinate object.

An intuition — and this is of crucial importance for the “quid facti” issue — does not stand by itself for a determinate object. It is rather, as I have claimed, a type of representation that provides a *necessary condition* for any possible relation to a determinate object. Intuitions without concepts are blind and concepts without intuitions are empty (*CpR*, A 51/B 75). However, intuitions without concepts are “blind” not because one is related by their means to fully determined objects “outside thought” of which one has no knowledge. Objects are *given* by means of intuition. Nevertheless, one can be related to a determinate object intuitively only on the condition that concepts and intuitions “are employed in conjunction”. *Determining* an object presupposes that understanding and sensibility operate together, since forming a judgment about an object is the only possible way of establishing a relation to it. Intuitions provide the singularity and immediacy condition, concepts the unity condition. Both are *different* conditions of objectivity. From this it follows that *the selfsame objects to which we are related by means of our singular and immediate representations are those to which we can be related by means of pure thought.*

This last argument reflects Kant's main intention in the transcendental deduction. The unity of the sensible and the intellectual is found in the concept of a scheme of the imagination and in the concept of an object of experience. The objects of experience are those for which *an appearance stands*. They are also the objects of a synthetic *a priori* judgment. No object of experience and, hence, no object of appearance is possible if it fails to comply with the basic conditions of thoughts about objects. No transcendental use of pure concepts is allowed, only an empirical use. This provides an answer to both the skeptic and the dogmatic.

Viewed from this perspective, relating the sensible to the intellectual is equivalent to harmonizing the mind within itself. This differs from the traditional problem of the so-called "external world", the problem of accounting for how the mind can reach an object external to itself, an object "determined outside thought". A purported solution is found in the Transcendental Deduction, where Kant preserves the distinction between thought and imagination, while aiming at the same time to explain why every imaginable *object* must fall under the synthetic conditions of the unity of consciousness. His main goal is to demonstrate that the *a priori* concepts of the understanding are *conditions for the possibility* of experience of objects, whereby the categories comprise just such conditions because any *thought about a real object* (of experience) necessarily presupposes them. They provide *the form* of any possible object of experience, as well as that of any possible judgment about real objects. In Kant's words (*CpR*, B 104): "...the same function which gives unity to the various representations in a judgment also gives unity to the mere synthesis of various representations in an intuition."

Maimon's Argument

There are three issues that separate Maimon's philosophical position from Kant's: Maimon's concept of an object, his concept of the *a priori*, and his principle of determinability. As I will demonstrate below, these three issues are responsible for his "quid facti" objection.

1. *Thought objects, real objects, and real thought objects*

To begin with, Maimon is committed to a distinction between (at least!)¹⁸ two kinds of objects: objects determined by thought and objects determined outside thought (*Logik*, V, 79-80). As Bransen observes (1991), 65, both are *intentional* objects, both are objects *for thought*. Hence, the object determined outside thought is not to be equated with the thing-in-itself, which cannot be an object *for consciousness*.¹⁹ The object determined outside thought is an object of (sensible) intuition (*Logik*, V, 385). The object determined by thought is an *a priori* object, and it is determined by means of the law of determinability (*Logik*, V, 383).

It could be argued that Kant's main epistemic goal — i.e., demonstrating that claims to *a priori* knowledge are "objectively valid" — is represented within Maimon's position by the search for the grounds of "unity" between the "object determined by thought" and the "object determined outside thought". This unified concept of an object is that of a "real thought object" (*gedachtes reelles Objekt*) (*Logik*, V, 242-3):

A real thought object (*gedachtes reelles Objekt*) is not only determined in-itself by means of inner properties but also determined through thought in relation to other real objects. Without the complete determination in-itself by means of inner properties one would have a thought object (*gedachtes Objekt*) but not a real [object]. And without relative determination in relation to other real objects a real object could exist but no thought object. Both are therefore necessary for the possibility of real thought objects (*gedachte reelle Objekte*).

The categories are functions of thought in relation to real objects. They are thought relations between real objects, but not real objects themselves...

The intuited objects are indeed real (because the sensible matter is absolutely determined) but (before the thought itself through the

¹⁸ Maimon's use of the term "object" is systematically lax. It appears variously in his writings. Nevertheless, the above two senses of the term are particularly relevant to the "quid facti" argument.

¹⁹ As Bransen observes (1991), 64-5, Maimon's main motivation here is to solve Kant's "tricky question of affection" and to account for the empirical element in experience. Bransen is right, I think, in pointing out the importance of this distinction for Maimon's antinomy of thought, as well as for the "quid facti" objection.

categories) not thought objects (*gedachte Objekte*). Therefore, a real thought object (*gedachtes reelles Objekt*) is possible only by applying the categories to sensible intuition.

Maimon is close enough to Kant in the foregoing passage. The Kantian question concerning the objective validity of the *categories* is transformed by Maimon into one concerning the possibility of a real thought object (*gedachtes reelles Objekt*). Nevertheless, it is important to recognize the profound difference between their respective positions. The Kantian problem is that of finding the unity between the heterogeneous elements of knowledge: *intuitions* and *concepts*. It is converted in Maimon's theory into the problem of finding the ground of unity between two kinds of *objects*: an object determined by thought and an object determined outside thought. Needless to say, there is no place within Kant's position for the concept of a determinate object that is determined by inner properties "outside thought" as something that can be *the content of our conscious states* (that is to say, what we are conscious of). For Kant, the concept of an object determined outside thought, independently of the functions of the understanding, is empty. Also, as I have already shown, there is no place within Kant's position for an object that is not an object of intuitions, i.e., a pure object. As noted above, the selfsame objects to which we are related by means of our singular and immediate representations are those to which we can be related by means of pure thought.

Maimon shares Kant's assumption that real thought must be directed to objects. However, he also acknowledges the existence of objects determined by thought as distinct in kind from objects of intuition. This can either mean that he thinks we might have access to objects even if there is no recourse to intuitions, or that we possess a non-sensible capacity for intuited objects. In any event, his distinction between objects determined by thoughts and objects of intuition determined outside thought is the main source of his "quid facti" objection, as the following passage demonstrates (*Logik*, V, 386-7):

Do we have pure knowledge related to empirical objects in an absolutely a priori way? In Kant's *Critique of Pure Reason* this question is answered affirmatively, and instead of any proof reference is made to its common use as if it were a fact. We say, for example, that the fire heats the stone, i.e. fire is the cause of the heating of

the stone, and so forth, and in this way we look for the cause of every appearance. This implies the presupposition of the concept of cause and of the principle that every appearance has a cause. Our critique of the faculties of cognition answers the question negatively, by showing that this so-called fact rests on an illusion of the imagination. *This concept and this principle might well be a priori, but they have no other sense but the one that is given to them by their actual use, and they have no other actual use than with respect to a priori objects* [my italics]. Substance, for example, means according to our Critique not that what exists in itself, whereas accident is what changes and what cannot exist in itself but only as an accident of the substance. According to our Critique, substance is what can be an object of consciousness in itself, whereas accident cannot in itself, but only in combination with the former be an object of consciousness; and so on. This is the entire foundation of my skepticism.²⁰

It is important to see that, in contrast to Hume, Maimon does not question "the fact" that we possess *a priori* knowledge. However, the actual use of *a priori* concepts is with respect to *a priori* objects. This is also how it is possible to answer the "quid juris" question in the affirmative and yet remain a skeptic. It is *possible*, claims Maimon, that objects of intuition obey the rules prescribed by the categories. Nevertheless, it is likewise possible that they *do not* obey these rules. Maimon can hold these contentions because, according to his position, the concept of a "real object" is meaningful even if the prime candidate of being a real object — i.e., the object of sensible intuitions — does not possess the formal character prescribed by the categories understood as forms of thought about real (as opposed to logical) objects. As I affirmed above, Kant denies these contentions. And he denies them *as part of the need to provide room for a priori knowledge*.

2. Subjective necessity and objective necessity

Another point of difference between Maimon and Kant concerns the nature of *a priori* knowledge. Time and again, Kant distinguishes between "mere subjective necessity" and the "objective necessity" properly ascribed to the categories. His reasons are quite plain. The phrase "subjective necessity" seems fairly innocuous. However, the claim that one is conscious of oneself as being

²⁰ I have used Bransen's translation of this passage (1991), 77.

under some form of "subjective necessity" which is distinct from "objective necessity" entails a contradiction. If a person regards the necessity she ascribes to a proposition as being "merely subjective" in the sense that *only* she is compelled to accept it as necessary, then she herself must have some reasons for the proposition's possible negation. In that case, she would be accepting the necessity of the proposition and denying it at the same time. As Kant descried, such "subjective necessity" can be nothing other than irrational inclination; it is certainly inadequate as part of a concept of *a priori* knowledge. If, he pursued, the only available kind of necessity forming part of the concept of *a priori* knowledge is that of 'mere subjective necessity', the result is the loss of our concept of *a priori* knowledge, which becomes incoherent thereby. As such, one cannot claim to possess, as a matter of fact, *a priori* concepts and judgments.

Maimon disagrees with Kant. As noted above, he accepts Kant's factual claim that we possess *a priori* concepts and judgments. But he identifies Kant's objective necessity with subjective necessity. He goes as far as to deny that the phrase "objective necessity" is meaningful (*Tr*, II, 174-5).²¹

It is not easy to see how one can save Maimon from being inconsistent here. As I stated previously, he thinks that the "quid juris" question can be answered affirmatively with respect to *a priori* objects. He presumably does not believe that the applicability of the categories to *a priori* objects is founded on "mere subjective necessity". One way of rescuing him from inconsistency is to understand him as distinguishing between the necessity ascribed to judgments about objects determined by thought and the necessity ascribed to judgments about objects of intuition that are determined outside thought. The necessity ascribed to judgments of the first kind is "subjective", whereas that ascribed to judgments of the second kind is "objective". Since, as Maimon insists, objects of intuition are determined "outside thought", there is no sense in which one can make objectively necessary judgments about them.

Whether or not these considerations save Maimon from inconsistency, they accentuate the inner connection between the various

²¹ By this he mainly means to claim that no objective necessity can be ascribed to judgments about singular objects. Bransen's translation (1991), 77.

components in Kant's solution to the problem of *a priori* knowledge, as well as the fundamental differences between Maimon's position and Kant's. Kant identifies the set of objects to which we might have intentional access as that of (phenomenal) objects of experience. He criticizes Hume's empirical account of the necessity ascribed to *a priori* claims to knowledge, and he denies the claim that sense impressions can be regarded as objects of our conscious states. These contentions and their justifications are all fundamental components of one unified theory.

3. *The law of determinability*

I now proceed to the third and final issue of disagreement between Maimon and Kant: the highest principle of real thought. According to Kant, real thought is grounded on synthetic judgments. Maimon, among others of his day, was dissatisfied with Kant's account of syntheticity,²² and, in order to resolve the difficulties related to Kant's theory of synthetic judgment, he introduced the principle of determinability as "the highest principle of real thought", presenting it as follows (*Logik*, V, 78):

This [the principle of determinability] is itself made up of two principles: 1) a principle which concerns the *subject* in general: Each subject should not only as a subject, but also in itself, be a possible object of consciousness; 2) a principle which concerns the *predicate*: Each predicate should not in itself, but as a predicate (related to the subject) be a possible object of consciousness. What does not conform to these principles might be just a *formal* or, perhaps, an *arbitrary*, but not a *real* thought.²³

There are several reasons for believing that Maimon's commitment to the principle of determinability is responsible for his skeptical position. A full account of his principle exceeds the scope of the present paper. My concern here is confined to certain of its aspects — those that are responsible for the differences between Maimon and Kant. The main problem that Maimon aims to solve by introducing the principle of determinability concerns the

²² Eberhard and Maaß, the main contributors to the *Philosophisches Magazin*, presented a detailed criticism of Kant's distinction between analytic and synthetic judgments. On this subject, see Kant (1973) and Senderowicz (1998)

²³ Bransen's translation.

relation between the subject and predicate within what Kant classifies as a synthetic judgment. In a synthetic judgment, it will be recalled, the predicate is not contained in the subject. The principle of determinability cites the conceptual relation between the subject and the predicate of a subset of those judgments characterized by Kant as synthetic as being *the* kind of a conceptual relation upon which "real thought" must be based. It stresses the asymmetric relation between the subject and predicate of a real thought. The subject of a real thought must be a possible "object of consciousness" in itself (and not the subject of a judgment). The predicate of a real thought should not be a possible object of consciousness in itself, but rather an object of consciousness as predicate (related to the subject). The relation between the subject and predicate of a real thought is that between a determinable and a determination. For example, the judgment "the color is green" is not analytic according to Kant's explicit formulation. However, the concepts "green" and "color" are related to each other as determination and determinable. The concept "green" cannot be "an object of consciousness" independently of the concept "color". On the other hand, the concept "color" can be "an object of consciousness" independently of "green". In other words, the subject of a real thought is *conceivable* without the predicate, whilst the predicate is *inconceivable* without the subject. By contrast, the subject and predicate of a judgment such as "grass is green" are not related to each other as determination and determinable in the above sense. According to Maimon's theory, this judgment states an arbitrary fact.

It is crucially important to see that, for Maimon, the predicate in a real thought must be *inconceivable* without the subject, whereby the unity of a real judgment is based on a relation between conceivability and inconceivability. There is no appeal to intuitions. If one accept this as "the highest principle of real thought", the relation between the categories and sensible intuitions or that between the subject and predicate of a perceptual empirical judgment (e.g., "this man wears a red shirt") becomes arbitrary. In other words, commitment to this principle invites skepticism.

One way of explaining Maimon's introduction of determinability as the highest principle of real thought is by noting his desire to find a purely conceptual principle of rationality, i.e., one

that makes no appeal to extra-conceptual elements. Here, again, a fundamental difference between Maimon and Kant is revealed. The reader will recall Kant's claim that no purely conceptual account of real thought is possible. Among his reasons were the disastrous epistemic implications of such a position. It was Kant who pointed out that Hume's problem arose from there being a sense in which appearances are conceivable without the categories. Kant's way out of this difficulty was to "explain how it can be possible that the understanding must think concepts, which are not in themselves connected in the understanding, as being necessarily connected in the *object*" (*CpR*, B 127-8).

I mentioned before that Maimon introduced the principle of determinability in response to the difficulties incurred by Kant's explicit formulation of the analytic/synthetic distinction. In fact, Kant's distinction raises many questions. Nevertheless, it is clear that Maimon's principle of determinability falls short of providing a plausible account of the set of judgments Kant classifies as "synthetic judgments". For example, no judgment about an *object* of experience — the paradigm case of Kant's synthetic judgments — complies with this principle. There is no relation of determinability between "John" and "wearing a red shirt". The question that remains unanswered is: Why should one accept a principle as "the highest principle of real thought" if its acceptance implies that most of what one thinks one knows is not an instance of real knowledge? Kant was (probably) the first philosopher to claim that if a philosophical conception has radical skeptical implications, these latter likely attest to an innate fallacy in the conception, providing us with an incentive to probe deeper into our minds in order to find an alternative free of such implications. Kant's theory of judgments had its deficiencies. Nevertheless, it represents an immense stride towards a non-skeptical epistemology and philosophy of the mind.

Conclusion

My basic thesis in this paper is that Maimon's "quid facti" argument is based on his commitment to a philosophical program in competition with Kant's in the *Critique of Pure Reason*. Insofar as

I can see, Maimon submits no rationale that convincingly undermines the cogency of Kant's claims, and therefore it cannot be maintained that his challenge raises an internal difficulty in Kant's position.

As Bransen observes, Maimon's skepticism arose in part as a response to Kant's transcendental dualism — the dualism between the unknown thing-in-itself and the phenomena. Transcendental dualism is notoriously problematic, and many of the problems it incurs were already pointed out in Kant's time. As I have suggested above, Maimon's desire to provide a logical account of "synthesis" is another possible basis for his skepticism. Both issues contribute to the impression that Kant's philosophical position as a whole suffers from some internal difficulty.

Kant was, indeed, explicitly committed to the distinction between the thing-in-itself and the phenomena. Nevertheless, this should not mislead us into thinking that his theory of knowledge and the mind — specifically that portion whereon his solution to "the problem" of *a priori* knowledge was based — was contingent upon "transcendental dualism". On the contrary, it is clear that his main purpose in restricting our claims to *a priori* knowledge to the phenomena arose from his conviction that the unknown thing-in-itself is *utterly irrelevant* to the possibility of knowing empirical objects.

The assumption that Maimon's "quid facti" argument reveals an internal difficulty in Kant's theory ignores the complexity of the debate between them, a debate which, as I have shown, cannot be reduced to a single well-defined issue. Their contention concerns the most basic notions of logic and epistemology — terms such as "judgment", "real object", "concept", "a priori", "subjectivity", and many others, to which Maimon and Kant assigned different meanings. These differences reveal two distinct philosophical approaches with radically varying appraisals of the ordinary claims of scientific knowledge.

As Beiser remarks (1987), 286, Maimon's skepticism had an important influence on post-Kantian German idealists. I have claimed in this paper that Maimon's "quid facti" argument is ill-founded as an internal criticism of Kant's transcendentalism. One should add that Kant's set of *a priori* concepts and principles conformed to the scientific knowledge of his day better than the

skeptical alternative. Accordingly, the influence of Maimon's skepticism on the later development of German idealism raises many interesting questions. If we wish to answer them, however, we cannot avoid the task of reinterpreting this episode in the history of German philosophy.

WHAT SHOULD KANTIANES LEARN FROM MAIMON'S SKEPTICISM?

PAUL FRANKS

I: *Introduction*

Near the end of the *Versuch*, Maimon describes a philosophical position which he ascribes to "the rational dogmatist and the empirical skeptic".¹ When he considers whom he would mention if asked to name someone occupying that position, he says that, for now, he could name only himself.² Maimon's self-description has presented interpreters with a puzzle. Some have found him undecided between two alternatives,³ some have found him more skeptical than dogmatic,⁴ and others have found him more dogmatic than skeptical,⁵ while still others have regarded him as the proponent of a "middle way" between dogmatism and skepticism.⁶ Remarkably few have insisted on the plain implication of Maimon's self-description: that he takes himself to be *both* dogmatic *and* skeptical, and that he sees no contradiction in being both because of the way in which he distinguishes the rational from the empirical.⁷

Indeed, Maimon's self-description is surely intended to parallel Kant's description of himself as *both* a transcendental idealist *and*

¹ I am grateful for conversations with Karl Ameriks, Frederick Beiser, Meir Buzaglo, Stanley Cavell, James Conant, David Finkelstein, Michael Friedman, Andrew Janiak, Hindy Najman, Hilary Putnam and participants in the Maimon conference, 2000. Discussions with Gideon Freudenthal have been especially helpful. All translations are my own unless otherwise specified.

Maimon, II, 432.

² Maimon, II, 436.

³ See Atlas (1964), 16-18.

⁴ See Kuntze (1912a), 41, and Erdmann (1977), 536, cited by Beiser (1987), 370n.5.

⁵ See Lehmann (1931), 37, and Zubersky (1925), 79, cited by Engstler (1990), 237n.

⁶ See Beiser (1987), 303-309, and 370n.5, where Cassirer (1974), 103, is cited as an antecedent.

⁷ See Engstler (1990), 236.

an empirical realist, which Maimon reformulates to describe Kant as a rational skeptic and an empirical dogmatist.⁸ Of course, Kant's conjunction has been even more controversial than Maimon's. But, without attempting to interpret Kant's position here, I want to follow a suggestion raised by the parallel. Kant says clearly that transcendental idealism is, at it were, in the driving seat. It is only *because* he is a transcendental idealist that Kant can be an empirical realist.⁹ Similarly, it might be suggested, Maimon's rational dogmatism is in the driving seat. It is only *because* he is a rational dogmatist that he can be — or, perhaps, can only be — an empirical skeptic.¹⁰

Much will follow if this is true. For I will argue that Maimon's rational dogmatism rests on a fundamental presupposition that Kant rejects. If this is so, and if Maimon's rational dogmatism is in the driving seat, then Maimon's skepticism cannot be a challenge to Kant based solely on Kant's own assumptions. The dialectic between Maimon and Kant will then be a clash between different programs with different presuppositions, not a conflict between a position and its putative refutation.¹¹ But even if — or to the extent that — this is so, Kantians may still have something valuable to learn from Maimon's program. I will argue that, even if Maimon's skeptical criticisms of Kant depend on a rational dogmatist's assumption that Kant rejects, those criticisms nevertheless reveal how difficult it would be to construct an adequate account of

⁸ *CpR*, A 367-380; *Tr*, II, 430-431.

⁹ *CpR*, A 369-370, translated in Kant (1998), 426: "It is really this transcendental realist who afterwards plays the empirical idealist; and after he has falsely presupposed about objects of the senses that if they are to exist they must have their existence in themselves even apart from sense, he finds that from this point of view all our representations of sense are insufficient to make their reality certain. The transcendental idealist, on the contrary, can be an empirical realist . . ."

¹⁰ See Lask (1923), 50-51: "Thus the demand that the manifold must be something '*a priori* given', something '*a priori* producible and masterable, becomes for Maimon the one and only criterion of the 'real', i.e., of thought that is at once *a priori* and concrete. Far more boldly and recklessly than Kant himself, he draws the 'skeptical' consequences resulting necessarily from so radical an apriorism. Only mathematics can contain real thought, not natural science." See also Kroner (1921), I, 355-356: "The Maimonian theory is no more than a mathematical analogy . . . Maimonian skepsis is grounded on the incomprehensibility of this procedure of the understanding, which can be rendered intelligible only analogically." Both are cited by Engstler (1990), 237.

¹¹ See Senderowicz in this volume for a similar view.

ordinary practices of judgment from the materials provided by Kant.

II: *Kantian Dualism*

Kant's program and Maimon's program rest on fundamentally different presuppositions. Maimon is a monist where Kant is a dualist.

There are, of course, a number of Kantian dualisms: sensibility and understanding, intuition and concept, theoretical reason and practical reason, appearances and things in themselves, phenomena and noumena. Each deserves its own story. But there is, I claim, one dualism at the root of all the others, a dualism so deep that it guides much of Kant's critical thinking, although it rarely surfaces in explicit discussion. It is a dualistic commitment to two conceptions of the intelligibility of things.¹²

On the first conception — which I will call *infinite intelligibility* — things are intelligible without any limit whatsoever. For every thing, there is a sufficient reason, and the series of reasons neither goes on forever, nor turns in a circle, nor terminates arbitrarily; instead, the series of reasons ends with an absolute reason that is self-explanatory, or wholly beyond the need for explanation.¹³

On the second conception — which I will call *finite intelligibility* — there are limits to the intelligibility of things. For every thing,

¹² I leave open the question how to specify the explananda: whether "things" are, say, entities or events. On dualism, compare Guyer (2000), who argues that the dualism of concept and intuition is fundamental. I agree that the dualities of understanding and sensibility, reality and appearance depend on the duality of concept and intuition. But I find the duality of finite and infinite intelligibility to be still more fundamental. As Guyer documents, Kant took numerous steps towards the concept/intuition duality throughout his pre-critical work, but the final, critical step was taken only with the notion of a *form* of intuition in the first *Critique*. On my account, that crucial, innovative notion is Kant's response to the realization that finite intelligibility is neither reducible to infinite intelligibility, nor supervenient upon infinite intelligibility, nor fully self-standing, nor dispensable. For more, see Franks (forthcoming)

¹³ As early as 1755, Kant rejected as absurd the idea of a *causa sui* that needs an explanation which it also provides. Instead, Kant affirms the idea of an ultimate, non-arbitrary ground that renders further questioning unnecessary. See Kant, AA, I, 394, translated in Kant (1992), 15: "For when, in a chain of grounds, one has arrived at the beginning, it is self-evident that one comes to a stop and that the questioning is brought to an end by the completeness of the answer."

there is a reason sufficient unto that thing, but the series of reasons terminates with ultimate presuppositions of intelligibility that cannot themselves be explained.

Kant's work, throughout his life, was largely a response to the impressive but conflicting achievements of Leibniz and Newton. A crucial step on the way to the critical philosophy was taken when Kant saw that this was a conflict between the two conceptions of intelligibility. Leibniz had developed a clear articulation of infinite intelligibility and its implications, but Newton's physics exemplified finite intelligibility.¹⁴

A fundamental but rarely appreciated aspect of Kant's critical revolution is his commitment to *both* infinite intelligibility *and*

¹⁴ To Leibniz and his followers, this could mean only that Newtonian physics did not render the physical genuinely intelligible. It is unclear whether Newton or any Newtonian before Kant was fully aware that it was necessary to articulate a distinctive conception of intelligibility in order to show how Newtonian physics was genuinely intelligible. Newton himself sometimes insists that genuine explanation is achieved by knowing the laws of gravity and its role in explaining the motions of the heavenly bodies and the earthly seas, even if one does not know the cause of gravity. See, e.g., Newton (1972), 943 and (1959-1976), V, 300. But he does not suggest, more radically, that the cause of gravity cannot in principle be known, and that only finite explanation is ultimately available. Indeed, his theological voluntarism amounts to a conception of infinite intelligibility, according to which, series of reasons terminate in an exercise of divine will. Voluntarism is, however, unacceptable to Leibniz, because it leaves open the possibility of an arbitrary act of divine will, which is to Leibniz a lack of intelligibility. Indeed, it is precisely because Clarke leaves this possibility open that Leibniz doubts Clarke's avowal of the Principle of Sufficient Reason, which Leibniz understands as the articulation of a non-voluntarist conception of infinite intelligibility. See Leibniz (1956a), 26. Kant expresses his understanding of Newton's innovation when he says in 1764 that, "According to this [Newtonian] method, through certain experience and, if need be, with the help of geometry, one should seek out the rules in accordance with which certain phenomena of nature occur. Even if one does not discover the first ground of these in the bodies in themselves, it is nonetheless certain that they operate according to this law and one explains complex natural events when one clearly shows how they are governed by these well-established rules." See Kant, AA, II, 286, translated in Kant (1992), 259. By the time of the *Critique of Pure Reason*, Kant's view is that the laws of nature have no "first ground" and are only finitely intelligible. However, the laws of nature are expressible only in terms of categories whose *a priori* origin leaves open the possibility that they may be used to think things in themselves — that is, to articulate infinite intelligibility. Thus, although Kant rejects the Leibnizian position that the finitely intelligible supervenes upon the infinitely intelligible, he nevertheless maintains that the conceptual resources required for finite intelligibility would not be available unless the conceptual resources required for infinite intelligibility were also available. I am grateful to Andrew Janiak for discussion of these topics. See Janiak (2001).

finite intelligibility. The world as known by God, and the world as viewed from the standpoint of morality, is infinitely intelligible, retaining some features of Leibnizian metaphysics.¹⁵ But the world as theoretically known by us is finitely intelligible, retaining some features of Newtonian physics. Most notable here is Kant's idea that our sensibility, which renders our knowledge finite in the sense that it depends partly on what is given, is not simply a purveyor of sensible matter, but *has its own forms*. These forms are, of course, space and time, but it is conceivable that another species of finite rational beings could have quite different forms of sensibility, and there can ultimately be no explanation why our sensibility has just the forms it has.¹⁶ Yet, although these forms are in that sense arbitrary, they are nevertheless genuine *forms*. They are the basic structures of a kind of finite intelligibility that plays a central role in our lives. The idea of a form of sensibility is strikingly novel, and expresses Kant's commitment to the genuineness and irreducibility of finite intelligibility.

Kant's commitment to two conceptions of intelligibility has been overlooked by a remarkably large number of post-Kantian philosophers and Kant interpreters, both in Kant's day and in ours.¹⁷ Many have read Kant as if he held only one conception of intelligibility, and they have then ignored — or interpreted away — all signs of the other. Other readers have ascribed only one conception to Kant, but they have detected signs of the other conception, and have taken those signs to mark a *problem* in Kant's position.

¹⁵ Karl Ameriks has argued in several important works that Kant's critical philosophy is less hostile to dogmatic metaphysics than is usually assumed. See Ameriks (1992), (2000a), (2000b).

¹⁶ *CpR*, B 72.

¹⁷ Besides the striking affinities, there are also important and often missed distinctions between non-dualistic readers of Kant. First, one needs to distinguish between those who regard Kant as committed only to infinite intelligibility and those who regard him as committed only to finite intelligibility. Second, one needs to distinguish between those who regard sensibility and understanding as derivable from a single, underlying root, and those who regard sensibility and understanding as reciprocally dependent abstractions from concrete experience, neither of which is intelligible apart from the other. The "common root" tradition, based on A 15/B 29, which includes various German Idealists, as well as Heidegger and Cohen, is usefully surveyed and criticized in Henrich (1994), 17-54. The other tradition is exemplified by Strawson (1966), 47-51, and McDowell (1994), 3-4.

Maimon is a pioneer — perhaps *the* pioneer — of the latter approach. He is well attuned to evidence that Kant is not committed to the infinite intelligibility of the world we humans know and, unlike many Kant-interpreters in both the German and Anglo-American traditions of Kant-interpretation, he does not interpret that evidence away. But Maimon assumes that Kant has saddled himself with an insoluble problem, because Maimon himself is committed to infinite intelligibility as alone genuine, and can make little sense of any other conception of intelligibility, except insofar as it is a restricted version of infinite intelligibility, or an approximation thereto.¹⁸

Now, Maimon's rational dogmatism consists in his affirmation that we do have knowledge that meets the demand for infinite intelligibility: mathematical knowledge.¹⁹ If, as the parallel between Maimon's self-description and Kant's suggests, Maimon's rational dogmatism drives his empirical skepticism, then that skepticism presupposes an commitment to infinite intelligibility as alone genuine, a commitment at odds with Kant's dualism. Then Maimon and Kant will differ in their fundamental presuppositions.

III: *The Question Quid Juris*

I now turn to Maimon's argument for rational dogmatism. Maimon is not simply returning to pre-Kantian metaphysics, despite his positive use of the term "dogmatism", because his argument's transcendental strategy marks it as post-Kantian. In effect, Maimon argues that commitment to infinite intelligibility as alone genuine is a transcendently necessary condition for a satisfactory solution to Kant's problems. However, Maimon has a distinctive, if not unparalleled understanding of the objective of transcendental philosophy. In his essay on philosophical progress since Leibniz and Wolff, Maimon says, "*Philosophy is a science whose object is the form of a science in general. . . transcendental philosophy, [is] the science of the forms of thought in relation to an object of experience in general*".²⁰

¹⁸ This is clear, not only from Maimon's insistence on the infinite intellect as transcendental condition, which I will discuss below, but also from his formulation of the Principle of Sufficient Reason. See, e.g., *Tr*, II, 392.

¹⁹ See, e.g., *Tr*, II, 363; *PhW*, III, 184; *Strf*, IV, 42, 214n..

²⁰ *Strf*, IV, 35.

For Maimon, transcendental philosophy is the investigation of the necessary formal conditions for the possibility of science.

One of Maimon's most suggestive formulations is that the fundamental problem of transcendental philosophy — the question *quid juris* concerning our right to apply the categories to sensuously given objects²¹ — is equivalent *both* to the question of creation, which was central to the concerns of medieval philosophers like Maimonides, *and* to the question of the community of soul and body, which was central to the concerns of early modern philosophers like Descartes. As Maimon explains, "The question of the explanation of the unification of soul and body is . . . reduced to the following question: how is it conceivable that forms *a priori* should agree with things given *a posteriori*? And the second question is reduced to the following: how is the coming-to-be of matter, as something merely given but not thought, conceivable through the assumption of an intelligence, since they are indeed so heterogeneous?"²² Clearly, Maimon takes the question *quid juris* to be primarily the question: how is it possible to apply forms of intelligibility to given cognitive matter? In light of Maimon's conception of transcendental philosophy, we might also formulate the question as follows: how is it possible for given cognitive matter to become an object for science?

Now Maimon famously claims that the question is simply unanswerable on the Kantian assumption that "sensibility and understanding are two wholly different sources of our knowledge". However, he says, the question *is* answerable on what amounts to a *twofold assumption*, ascribed by Maimon to Leibniz and Wolff. The first assumption, as Maimon puts it in the *Versuch*, is that the cognitions of sensibility and understanding flow from a single source and differ only in degree of completeness.²³ Or, as Maimon puts it in his commentary to Maimonides' *Guide of the Perplexed*, "the understanding and sensibility are not things distinct from one another with a real distinction, but rather with a merely formal distinction."²⁴ The second assumption is our finite intellect is

²¹ For Kant's distinction between the questions *quid juris* and *quid facti*, see A 85/B 117.

²² *Tr*, II, 62-3.

²³ *Tr*, II, 63.

²⁴ *Giv'at Hammore*, 107.

"exactly the same as" an assumed infinite intellect, "only in a limited way." Or, as Maimon puts it in his commentary, "the difference between the infinite intellect, may it be exalted, and our intellect [is] be merely formal".²⁵

It is clear at first glance that these remarks adduce a conception of infinite intelligibility as transcendently necessary condition of the possibility of science. But it is worth a closer look to explore the details of Maimon's formulations. As Maimon sees it, the difference between himself and Kant may be put as follows. Kant is committed to two *real* distinctions — between sensibility and understanding, and between the finite and the infinite intellects — where Maimon is committed to two *formal* distinctions. Once unpacked, this invocation of scholastic ontology's doctrine of distinctions reveals much about Maimon's relationship to Kant, and also about the blind-spots in Maimon's understanding of that relationship.

A real distinction is a distinction between terms that are intelligible independently of one another, such as distinct substances, or modes of distinct substances.²⁶ Presumably, Maimon understands

²⁵ *Idem*.

²⁶ For a classic discussion of real, modal and rational distinctions, and an argument that no other distinctions need to be added to the list, see Suarez (1947). These distinctions have occasioned much terminological variation and confusion. But, in the wake of Suarez, there appears to be widespread consensus about the *extensions* of these distinctions, while there are at least two distinct traditions concerning their *intensions*, corresponding to two traditions concerning the concept of *substance*. Thus real distinctions obtain between distinct substances or between modes of distinct substances; modal distinctions between an essential property of a substance and a mode of the same substance, or between modes of one substance; and rational distinctions obtain between an object and itself, considered under two concepts. In the Cartesian tradition, these distinctions are explained as follows: X and Y are really distinct iff each *can exist* when the other does not; X and Y are modally distinct iff either one can exist when the other does not, but not vice-versa, or either can exist when the other does not, but they have a necessary condition for their existence in common; and X and Y are rationally distinct iff neither can exist when the other does not. See Descartes (1964-76), VII, 100, 120-121; VIII, 28-30; IV, 348-350. See also Gilson (1979), 86-90; Wells (1966); Secada (2000), 194-197. In the Leibnizian tradition, the distinctions are explained differently: X and Y are really distinct iff each *is intelligible* independently of the other; X and Y are modally distinct iff one is intelligible independently of the other, but not vice-versa, or either can exist without the other, but they have a necessary condition for their intelligibility in common; and X and Y are rationally distinct iff they have all necessary conditions for their intelligibility in common. The Leibnizian-Wolffian school regards the Cartesian account of substance or real distinction as

Kant to hold that sensibility and understanding are modes grounded in distinct essences, hence that we have sensibility insofar as we are animals, not insofar as we are rational, while we have understanding insofar as we are rational. Additionally, Maimon seems to understand Kant to hold that the essence of a finite intellect is distinct from the essence of the infinite intellect.

It is harder to be sure how Maimon understands his own position. For “formal distinction” has been understood sometimes to signify a real distinction, sometimes to signify a merely rational distinction, and sometimes to signify one or other distinction intermediate between the real and the rational.²⁷ Which of these is intended by Maimon is not at all obvious. Here I want to pursue the hypothesis that the formal distinctions to which Maimon is committed are in fact the intermediate distinctions sometimes called *modal* distinctions.²⁸ More precisely, the hypothesis is that Maimon is committed to distinctions between X and Y such that X is an essential property of a substance while Y is a mode or non-

an error that leads to Spinozism by leaving no room for finite, dependent substances. See, e.g., Wolff’s refutation of Spinoza in Wolff (1981), XV, and Kant’s remarks in Kant, AA, XXVIII, 564. Both Kant and Maimon should be situated in the Leibnizian rather than the Cartesian tradition.

²⁷ The term “formal distinction” is due to Duns Scotus, and the confusion surrounding the term may be traceable to Scotus’ own formulations. See Grajewski (1944), e.g., 5 n.6: “. . . at times Duns Scotus substitutes the formal distinction for the virtual distinction of the Thomists (e.g. among the attributes of God); on other occasions, he uses the formal distinction in lieu of the real distinction (e.g., the distinction of the faculties of the soul).” Suarez (1947) argues that, insofar as it is useful, the formal distinction is reducible either to a rational distinction in which one thing is considered under two inadequate concepts, or to a modal distinction between an essential property of a substance and a mode of the same substance. He therefore argues for the abandonment of the term “formal distinction” and for the adoption of the term “modal distinction”.

²⁸ It would be worthwhile to pursue the alternative hypotheses that Maimon’s formal distinctions are either merely rational or perhaps, if he does not follow Suarez, to be understood in some other Scotist fashion. For a contemporary view that invokes the theory of distinctions, see McDowell (1994), 3-4, who maintains that a thought produced by understanding alone would “not really be a thought at all,” and, 9, that sensibility “does not make an even notionally separable contribution” to experience. In other words, McDowell’s view is that there is not even a rational distinction between the cognitive contributions of sensibility and understanding, unless inadequate concepts are used. Sensibility and understanding are to be distinguished solely via the distinction between a passive and an active engagement of one and the same cognitive capacity.

essential property of the same substance. On this interpretation, understanding is essential but sensibility is non-essential, and the infinity of understanding is essential while the finitude of understanding is non-essential. Thus, Maimon is committed to the view that there is one conception of intelligibility, which is essentially infinite. Nevertheless, he also holds that there is a finite mode of intelligibility, which neither constitutes a really distinct conception, nor is distinct only in conception.

This may be a helpful formulation of Maimon's own position. But is the ascription of two real distinctions fair to Kant? Or are there other possibilities open to Kant and to his interpreters, possibilities to which Maimon is blind?

I believe that it is possible to interpret Kant himself espousing two formal, i.e., modal distinctions.²⁹ First, it is possible to ascribe to Kant a modal distinction between sensibility and understanding, on the basis of a reading of Section 26 of the B-edition Transcendental Deduction. There Kant says that the unity of the formal intuition of space was ascribed in the Transcendental Aesthetic "merely to sensibility, only in order to note that it precedes all concepts, although, although to be sure it presupposes a synthesis, which does not belong to the senses but through which all concepts of space and time first become possible" and through which "the understanding determines the sensibility".³⁰ He also says that, "It is one and the same spontaneity that, there under the name of imagination and here under the name of understanding, brings combination into the manifold of intuition."³¹

Here Kant ascribes primacy to understanding over sensibility. For it is the former that determines the latter, not vice-versa. In addition, Kant offers what he claims to be a strict deduction of the determinate forms of judgment,³² while offering no such deduction of the determinate forms of sensibility. This suggests that a finite rational being essentially has a discursive understanding with determinate forms of judgment whereas, while such a being must

²⁹ These interpretations are of course controversial and merit lengthier discussion elsewhere.

³⁰ *CpR*, B 161n.

³¹ *CpR*, B 162n.

³² *CpR*, A 67/B 92-B 113, known as the metaphysical deduction, thanks to B 159.

also have *some* faculty of affection, it is neither essential nor necessary to have *our* forms of sensibility: space and time.³³ Thus the distinction between discursive understanding and our sensibility is a distinction between an essential property and a mode of the same substance.

On this interpretation, Kant, like Maimon, distinguishes between sensibility and understanding not really, but modally. This does not mean, however, that Kant's position is the same as Maimon's. The central difference is that Kant regards the specific forms of sensibility as contingently determinable, whereas Maimon believes that, once the finitude of the understanding is assumed, space and time are derivable.³⁴

Second, it is also possible to ascribe to Kant a modal, rather than a real distinction between the finite understanding of human beings and the infinite understanding. One might think that such a view denies that finite rational beings are distinct from God, and therefore amounts to Spinozism. But this would be a misunderstanding. The suggestion is not that finite rational beings are modes of the infinite rational being. It is rather, that reason — the capacity for unconditioned determination — is an essential capacity for a rational being, whereas finite or discursive understanding is a contingent mode of a rational being.

Furthermore, in a finite rational being, who has both discursive understanding and reason, the latter has determinative primacy over the former, and thereby over sensibility. Note, for instance, the following neglected passage:

Consider only how you form the concept of God as Highest Intelligence. You think pure, true reality in Him, i.e., something that is not merely opposed to negations (as one commonly maintains), but rather and preeminently [something is opposed to] the realities in appearance (*realitas phaenomenon*), to all those that must be given to us through the senses and for just that reason called *realitas apparens* (albeit not in an entirely appropriate expression). If one now diminishes all these realities (understanding, will,

³³ *CpR*, B 72.

³⁴ The contingent determinability of the forms of sensibility is either neglected or denied by proponents of both the German and British traditions of non-dualistic Kant reading. On Heidegger, see Henrich (1994), 223-224, n.67. For a derivation of space and time that is remarkably similar to Maimon's, see Strawson (1992), 54-57, and (1997), 45-46.

blessedness, power, etc.) with respect to degree, then they remain ever the same [realities] with respect to manner (quality), [and] then you have properties of things in themselves, which you can also apply to other things besides God. You can think no other [properties of things in themselves], everything else is only reality in appearance (property of a thing as object of the senses), whereby you never think a thing as it is in itself. To be sure, it seems odd, that we can determine our concepts of things in themselves appropriately only insofar as we first lead back [*reduciren*] all reality to the concept of God and that we should apply it to other things as things in themselves only insofar as it finds its place within [that concept]. That alone is properly the means of separation of everything sensible and of appearance from that which can be considered through the understanding as appropriate to things in themselves.³⁵

Now, in Kant's view, although we cannot *know* things in themselves, we can *think* them. In order to think things in themselves, we have no alternative but to employ the very categories that are fundamental to our experience of appearances. In this passage, then, Kant envisages a derivation of the categories — the forms of discursive understanding — from reason's idea of God as infinite intellect.³⁶

Thus the formal structure of finite intelligibility is derivable from the formal structure of infinite intelligibility, and the distinction between them is accordingly modal, not real. But this does not imply Maimon's view that finite intelligibility is merely a restricted version of infinite intelligibility or an approximation thereto, let alone the Spinozist view that finite rational beings have no *substantial existence* apart from God.³⁷ It implies, rather, that, for

³⁵ Kant, AA, VIII, 154 (my translation).

³⁶ More specifically, Kant envisages a metaphysical deduction from the Transcendental Ideal of an *omnitudo realitatis* grounded in God as *ens realissimum*. For more on this project, which Kant never carried out, and which at other moments he would seem to oppose, but which the German idealists may be seen as implementing, see Franks (forthcoming a). On the Ideal, see Longuenesse, (1995) and (1998), 149-163, 294-310. The suggestion that Kant's Principle of Determinability, given in the Transcendental Ideal, plays a central role throughout the critical corpus opens the possibility for detailed comparison with Maimon's Principle of Determinability and its role in the derivation of the categories. On Maimon's Principle, see Schechter and Senderowicz in this volume.

³⁷ Nor does it imply, in Kant's view, any substantive commitment to the existence of the infinite intellect. For Kant, faith in God is grounded only through practical philosophy. The status of Maimon's commitment to the infinite

Kant, finite intelligibility is dependent on infinite intelligibility *for its fundamental concepts*. At the same time, the articulation of these concepts into determinate forms of experience retains a degree of autonomy from infinite intelligibility. For this articulation involves not only concepts but also forms of sensibility, which are *not* derivable from forms of understanding or reason.

The interpretation that I have just sketched suggests that Kant's dualism is subtler than Maimon suspects. If so, then although Maimon does not, like many others, simply impose his own monism onto Kant, he may nevertheless have a blind-spot when it comes to Kant's conception of finite intelligibility. For Maimon seems blind to the very idea of contingently determinable forms of intelligibility, hence blind to Kant's innovative idea of forms of sensibility: forms of *finite* intelligibility, which are nevertheless genuine forms of *intelligibility*, with some degree of *independence* from infinite intelligibility. He does not exactly argue against the Kantian innovation. Instead — if the interpretation I have sketched can be justified — he misrepresents it as a new version of the Cartesian real distinction, with all the attendant and perhaps insoluble problems about the possibility of interaction.³⁸ The deck is unfairly stacked against Kantian dualism.

Furthermore, there is a direct route from Maimon's commitment to infinite intelligibility to his empirical *skepticism*. For mathematical science is not merely a very good illustration of infinite intelligibility for Maimon. Rather, we have no clear grasp of what infinite intelligibility amounts to *apart* from the example of mathematical science, understood in Maimon's way. As Maimon memorably says, "Without the *Godhead* the world cannot be *thought* but, without the world, the *Godhead* cannot be *known*. Without *philosophy*, no *science in general* is possible, because it determines *a priori*

intellect is unclear in *Tr*, II, 64. However, he claims in *Leben*, I, 196-200 and *PhW*, III, 124-5 that the idea of God signifies a real synthesis with real consequences, and he argues in his last work, *KrU*, VII, 248-9, 278-9, that God is actual because He is the necessary condition of all universally and necessarily valid knowledge, and because we actually possess such knowledge in mathematics.

³⁸ Contemporary discussions of the viability of the idea of non-conceptual content may be seen as a debate about whether the distinction between sensibility and understanding is a real distinction (as some proponents of non-conceptual content maintain) or a merely rational distinction (as some opponents argue, notably McDowell). It is worth considering whether a taxonomy including varieties of modal distinctions might illuminate the discussion.

the form of a *science in general*. Without presupposing some other science, *philosophy* can have no significance whatsoever for us."³⁹

Thus the meaning of Maimon's monism begins to become clear only when one considers his account of the role of calculus in the mathematization of sensible nature. Even without the lengthy discussion merited by this account,⁴⁰ we can distinguish two problems that Maimon thinks are solved in the mathematization process, problems that correspond to the two monistic assumptions needed to answer the question *quid juris*. For the sensible impact of nature upon us is problematic in two ways: first, because the difference between sensations is *qualitative*, apparently inaccessible to quantitative treatment and, second, because we receive that impact *passively*.

The first step towards resolving these problems is to treat sensible *qualities* as infinitesimal *quantities* of the activity of an infinite intellect, which Maimon thinks of as generating objects in accordance with laws governing the ratios between the differentials. This step corresponds to the monistic assumption that sensibility and understanding are only formally or modally distinct. For, as Maimon intends that assumption, the cognitions of sensibility are not qualitatively distinct from the cognitions of the understanding, as they would be if the forms of sensibility were in some way independent of the forms of understanding and reason. Rather, the cognitions of sensibility are *limit-cases* of cognitions of the infinite understanding.

The second step towards resolving the problems of nature's sensible impact upon us consists in regarding the *passivity* of sensations and the *givenness* of the matter of sensations as an expression of the second monistic assumption: that our finite understanding is only formally or modally distinct from the infinite understanding. As I have interpreted that assumption, it means that the forms of finite intelligibility are not in any way independent of the forms of infinite intelligibility, but are ultimately and fully determined by them. This is exactly why we finite intellects can aspire to the ideal of grasping the lawful relations governing the infinite intellect's

³⁹ *Logik*, V, 19.

⁴⁰ See, e.g., Kuntze (1912a), 83-6, 327-339; Cassirer (2000), 93-100; Atlas (1964), 109-123; Engstler (1990), 124-189.

complete determination of objects. For our finite intellects are simply *limited versions* of the infinite intellect.

This way of answering the question *quid juris* can easily be seen to imply the following tripartite distinction. First, mathematics is *actual knowledge*, for it alone achieves — and indeed exemplifies — infinite intelligibility. Second, mathematical physics is *possible* or *problematic knowledge*. For physics could become genuine knowledge to the extent that it is fully mathematized.⁴¹ But it is doubtful that full mathematization has been or could be achieved. Third, ordinary — that is to say, non-philosophical or non-scientific, as we might say now that physics is no longer simply considered part of philosophy — practices of judgment are *not even possible knowledge*. For, in order to become genuine knowledge, those practices would have to be mathematized, and they would then clearly cease to be ordinary practices.

Thus, although Maimon is not himself as clear about this as one might wish, his empirical skepticism should be divided in two. Towards natural science, Maimon is a problematic skeptic, whose attitude is one of doubt. But towards *ordinary* practices of judgment, Maimon is a dogmatic skeptic, whose attitude is one of denial. Both attitudes follow directly from Maimon's rational dogmatism — that is, from his version of the rationalist's conception of the infinite demands of intelligibility, or from his insistence that the question *quid juris* can be solved only by the transcendental assumption of a monism focussing on the infinite intellect.

⁴¹ For Maimon's views on the mathematization of physics, see Freudenthal in this volume. As I have come to see through helpful conversations with Freudenthal, a further distinction needs to be noted here and to be clarified elsewhere. First, Maimon thinks that some mathematics, notably geometry, remains dependent on intuition and therefore has only subjective necessity, albeit a necessity that can approximate increasingly to objectivity. Second, Maimon regards some physical claims as dependent on a method of induction that has the virtue of systematicity, although it can never attain completeness. Besides the need to clarify the former, it is also necessary to determine whether the latter may be reduced to the former, whether physics might have the status, if not of objectively necessary, intuition-free mathematics, then at least of geometry. If physics can have a subjective necessity that approximates increasingly to objectivity, then it may be regarded as possible knowledge, which, however, always remains open to doubt. But, if physics must have a lesser status than geometry, then Maimon may be a dogmatic skeptic, not only about ordinary but also about physical knowledge-claims. For a passage suggesting the comparability of geometry and physics, see *PhW*, III, 197-200.

IV: *The Question Quid Facti: Part One*

But surely, you may say, Maimon also has arguments for empirical skepticism that are *independent* of his rational dogmatism, arguments given in his consideration of the question *quid facti*. I now turn to those arguments.

By the question *quid facti*, Maimon means the question: do we actually have experience? In his view, Kant takes empirical skepticism to present no threat to his critical philosophy only because he illicitly assumes the actuality of experience, an assumption that plays a crucial role in his argument for the validity of applications of the pure concepts of the understanding to sensuously given objects.

Maimon's question *quid facti* may sound bizarre. For, in much recent literature, the Transcendental Deduction has been interpreted as an argument, or as part of an argument, intended to refute either Humean empiricism⁴² or Cartesian skepticism.⁴³ If it is so intended, and if it assumes the actuality of experience, then the Deduction must operate with a conception of experience that either the empiricist or the skeptic cannot help but accept. It follows that Kant must conceive experience, either in empiricist fashion as the raw impressions given to the senses prior to conceptualization, or in skeptical fashion as the flow of mental events within the self-enclosed space of an individual mind.⁴⁴ Either way, the argument's target should be left with no serious question as to whether we actually have experience.

⁴² See, e.g., Ameriks (1978).

⁴³ See, e.g., Strawson (1966), 88.

⁴⁴ Anglophone commentators have often viewed Kant's goal as the refutation of skepticism, and have thus ascribed to him a minimal conception of experience. See, e.g., Strawson (1966), 85: "If it would be a disappointment of our analytical hopes to find an argument resting on the assumption (or definition) that experience necessarily involves knowledge of *objects*, the topics of *objective* judgments, how much more would those hopes be disappointed by an argument which assumes that experience is necessarily of an objective and spatio-temporally unitary world." For Strawson, 98, the Deduction's starting point is, rather, "The notion of a single consciousness to which different experiences belong", and those experiences need not, by assumption or definition, be of objects, let alone "of an objective and spatio-temporally unitary world." The task of the Deduction is to show that we could not have any experiences in the minimal sense unless we had some experiences of an objective and unitary world.

However, we may appreciate the seriousness of Maimon's question *quid facti* if we situate it within the context of an old debate, beginning in the 1780s, about Kant's conception of experience and the goal of the Transcendental Deduction.⁴⁵

As Frederick Beiser has pointed out, it was Johann Friedrich Schultz who first drew attention to the difficulties attending Kant's conception of experience and its role in the Deduction.⁴⁶ Indeed, Schultz' discussion was fateful, because it was determined, not directly by the Deduction, but by Kant's distinction in the *Prolegomena* between judgments of perception and judgments of experience, a distinction whose relationship to the A and B versions of the Deduction remains controversial and oblique.⁴⁷ Other contemporaneous discussions, including Maimon's, would follow Schultz' path, whether under his influence or because of the direct impact of the *Prolegomena*. Thus, when Maimon argues that Kant has illicitly assumed the actuality of experience, he is construing Kantian experience as the employment of judgments of experience, in which pure concepts of the understanding are applied to objects given to the sense, expressing putatively necessary and universal connections among appearances.⁴⁸ As Maimon reads the Transcendental Deduction, Kant's argument depends on the assumption that we actually have experience *in this sense*, an assumption

⁴⁵ More recently, Beck (1978) has argued that Kant used the term "experience" ambiguously in the opening sentences of the B edition, and Guyer (1987), 79-86, has argued that there is a related ambiguity in the method and goal of the Transcendental Deduction. For a decisive refutation of the ambiguity charge, see Engstrom (1994), n.6. See also Kant, AA, IV, 305n., where Kant distinguishes between the perception in an experience, which can ground merely contingent judgments, and judgments of experience, which claim necessary and universal validity. This distinction is helpful in clarifying apparent ambiguities elsewhere.

⁴⁶ Beiser (1987), 205-208.

⁴⁷ Judgments of perception express "only the logical connection of perceptions in a thinking subject", claiming to "hold only for us (i.e., for our subject)" and, indeed, "only in my present state of perception". In contrast, judgments of experience subsume perceptions under categories, and thus claim to be "valid at all times for us and for everybody else". See Kant, AA, IV, 297-301, translated in Kant (2002), 94-5.

⁴⁸ Maimon is aware that Kant's usage merits special scrutiny. See *Tr*, II, 192 for a reference to experience "in Kant's sense". Throughout the *Versuch*, Maimon makes it clear that the "empirical propositions" discussed by Kant are judgments of experience claiming necessary connections among sensuously given objects. See, e.g., *Tr*, II, 4-5, 73, 127-8, 184-5.

that is open to dispute not only by Cartesian skeptics but also by Humean empiricists.

It is helpful to review Schultz' brief but seminal discussion. The premise of the Deduction, he writes, seems to be either that we make judgments of perception, or else that we make judgments of experience. But either alternative encounters difficulties. First, suppose the premise to be that we make judgments of perception. Then Kant seems committed to the absurd claim that every particular judgment of perception (e.g., "the sun shining on the stone precedes the stone becoming warm") necessarily presupposes some particular judgment of experience (e.g., "the sunshine warmed the stone"), and thus presupposes the objective validity of the categories.⁴⁹ Besides, there appears to be an outright contradiction between Kant's claim in the *Prolegomena* that judgments of perception require only logical, not categorical connection, and Kant's argument in the Deduction.⁵⁰ Second, suppose the premise to be that we make judgments of experience — which, Schultz says, is probably Kant's "true meaning" in the Deduction. Then, as Ulrich had already pointed out in the work Schultz is reviewing, the Deduction seems trivial: "To be sure, everyone sees that no *judgment of experience* would be possible without the principle of causality, that is, that without it we could never infer that B must *always* and *necessarily* follow A. However, this proposition is almost *identical* and much too scanty. It could not be *Kant's* intention to demonstrate nothing more than this."⁵¹ In any event, a Deduction from judgments of experience would surely beg the question, not only against Hume, but also against a certain kind of rationalism. For the existence of universal and necessary connections among sensible appearances is exactly what is doubted by Hume, and is exactly what is denied by the proponent of pre-established

⁴⁹ Here Schultz neglects the distinction between particular applications of the categories (judgments of experience) and categorial principles. In contrast, the distinction is central to Maimon's thinking about the Deduction, as will become apparent below.

⁵⁰ Kant, AA, IV, 298. For an insightful attempt to resolve the apparent contradiction, see Longuenesse (1998), 167-195. For criticism of Longuenesse's account of the transformation of judgments of perception into judgments of experience, see Friedman (2000).

⁵¹ Schultz (2000), 211.

harmony — without real connection — between the empirical and rational orders.⁵²

Maimon reads Kant according to a version of Schultz' second proposal: as an argument from the actuality of judgments of experience. But Maimon's version is superior to Schultz' because it does not trivialize Kant's Deduction. In Maimon's view, the Deduction proceeds as follows:

- 1) We make particular judgments of experience, e.g. "the sunshine warms the stone", which claim necessary and universal connections among sensible appearances.
- 2) But no matter how many times one repeats particular judgments of a certain type, repetition can never justify belief in a universal principle, that *every* event is *necessarily* the effect of a cause from which it follows according to a law.
- 3) However, we could not make judgments of experience, as we actually do, unless we presupposed universal principles.
- 4) Therefore, the pure concepts of the understanding may be validly applied, with universality and necessity, to sensuously given objects.⁵³

Unlike Schultz' version, Maimon's does not render the Deduction "almost identical", because it distinguishes between particular judgments of experience and universal categorical principles. But, like Schultz' version, Maimon's leaves the Humean skeptic untouched.⁵⁴ For it assumes that we actually make judgments of experience, that we actually apply the pure concept of, say, causality, to sensibly given objects and events. But this is exactly what the Humean skeptic doubts or denies.

What does this Humean or Maimonian doubt or denial amount to? If it is doubt or denial that we are ever *justified* when we apply categories to the given, then it is the same doubt or denial that follows directly from Maimon's rational dogmatism, from the high

⁵² Kant addresses the rationalist in question in the B version of the deduction. See B 167-8.

⁵³ See, e.g., *Tr*, II, 5-6, 186-187.

⁵⁴ Maimon does not address Schultz' rationalist, who is committed to pre-established harmony between the rational and the empirical, perhaps because such a view seems to Maimon only half-heartedly rationalist, equivocal in its commitment to infinite intelligibility.

epistemic standard imposed by his commitment to the infinite intelligibility exemplified by mathematics as alone genuine. However, Maimon's consideration of the question *quid facti* adds an extra element to his empirical skepticism. The argument is not only that we do not satisfy the necessary conditions for the possibility of justified judgments of experience. The argument is also that we do not in fact make judgments of experience, that we do not actually apply the categories to sensuously given objects. Consequently, categorical principles cannot be justified as necessary presuppositions of actual applications of the categories.

What could Maimon mean by claiming that we do not in fact apply the categories? Could he really mean that we do not employ the category of causality?

Although the texts are far from clear, I think that, if we are to avoid contradictions and to be faithful to Maimon's language, then we must explain his claim in two ways. *Scientific* causal judgments do not apply the category of causality because their analysis shows that they make no claims whatsoever about universal and necessary connections. *Ordinary* causal judgments do not apply the category of causality because, although they purport to make claims about universal and necessary connections, their use belies the claims they purport to make.

The account of causal judgments given in the *Versuch* and in Maimon's commentary to chapter 68 of Maimonides' *Guide of the Perplexed* is an account of the use of the concept of causality in natural science: "For what does one understand in natural science (*Naturlehre*) by the word 'cause', except the development and dissolution of a phenomenon; so that one finds the sought after continuity between it and the antecedent phenomenon?"⁵⁵ When continuity — maximal identity or minimal difference — is judged to occur between two phenomena, then the transition from the first to the second is judged to be an *alteration* of a single underlying determinable, not a transition between phenomena grounded in distinct determinables. But no claim is made about the necessity of the transition, or about its exemplification of a universal law governing relations between phenomena of the relevant types. If this analysis is correct, then scientific causal judgments do

not apply a category — a concept of necessary and universal connection — to sensuously given objects.

Maimon sometimes argues, not that the meaning of “cause” is non-categorical, but that its use is based on an illusion or self-deception. In these passages, I suggest, he is discussing ordinary causal judgments. Unlike scientific causal judgments, ordinary causal judgments have the *form* of claims about necessary and universal connections. But this form, revealed by analysis, misrepresents the synthesis by which we actually arrive at the judgment, a synthesis that involves psychologically explainable habituation, not the application of a transcendently necessary *a priori* principle. Thus, for example, Maimon writes: “I deny, says my [skeptical] friend, that ‘Fire decomposes wood’, this expression so very useful in practical employment, is a judgment of the understanding (having necessity and universality). With justification, one can assert only that one has found it to be so whenever one has perceived fire in the vicinity of wood, but not that it *must* be so. The fact that the common man gives this expression the form of a necessary and universal judgment rests upon a *lack of philosophical knowledge* and of insight into the difference between a putatively necessary and universal judgment made with justification, and this [judgment] which is taken for one by means of an illusion.”⁵⁶ In passages like these, Maimon’s point is that Kant has not refuted Humean skepticism, and has therefore failed to deduce the objective reality of the categories, *even if Kant has argued validly that we would have no experience without the validity of categorical principles.*

Now Maimon is responding to a genuine feature of Kant’s thinking. For, in Kant’s view, a Humean approach to the categories may be legitimately excluded *in advance* of the detailed argument offered in the Transcendental Deduction. Kant seems to have two reasons for holding this view. First, any empirical derivation of, say,

⁵⁶ *Strf*, IV, 74. See also VII, 667: “The Kantian critical philosophy is indeed sufficiently grounded *formaliter*; it has the form of a complete system. But not *materia-liter*. The facts, which are laid at the ground of this system, are not provable. The testimony of common sense is indeed not valid, but rests rather on this self-deception.” See *PhW*, III, 44 for the claim that the Kantian categories are transcendental fictions, not genuine concepts of the understanding. On common usage, see also *KrU*, VII, 58-59, cited at n.59 below. For Maimon, genuine categories are mathematical. See *Logik*, V, 229-253.

the concept of causality would be, not an *explanatory* account, but rather a *revision* of our practices of causal judgment: "to the synthesis of cause and effect there belongs a dignity that can never be expressed empirically, namely, that the effect does not merely come along with the cause, but is posited *through* it and arises *from* it. The strict universality of the rule is therefore not any property of empirical rules, which cannot acquire anything more through induction than comparative universality, i.e., widespread usefulness. But now the use of the pure concepts of understanding would be entirely altered if one were to treat them only as empirical products."⁵⁷ Second, the categories may be deduced either empirically or transcendently, but not both. If they may be empirically deduced, then skepticism about their application to sensuously given objects is insuperable. But "the *empirical* derivation, however, to which both of them [Locke and Hume] resorted, cannot be reconciled with the reality of the scientific cognition *a priori* that we possess, that namely of *pure mathematics* and *general natural science*, and is therefore refuted by the fact."⁵⁸

Now, Maimon agrees with Kant that Hume cannot account for the *a priori* knowledge attained in pure mathematics. The concepts of pure mathematics cannot be empirically derived. But this has no clear implications for the categories. And Maimon does not see why Kant is entitled to assume that the possibility of an empirical deduction of the categories — hence, the possibility of empirical skepticism — has been excluded by the fact of natural science. First, he does not think that Kant is entitled to assume without argument that natural science uses the concept of causality to claim necessary and universal connections among phenomena. Second, he does not think that Kant is entitled to assume without argument that natural science and ordinary judgments use the pivotal concept of causality in the same way. This last point entails that, even if Kant were justified in claiming that the actuality of natural science excludes the possibility of empirical skepticism, the possibility of empirical skepticism about ordinary causal judgments would still be a threat — a threat that Kant does not even see the need to confront. So Kant begs the question *quid facti* with respect

⁵⁷ *CpR*, A 91-2/B 123-4, translated in Kant (1998), 223.

⁵⁸ *CpR*, B 128, translated in Kant (1998), 226.

to natural science, and fails even to raise the question with respect to ordinary judgments.⁵⁹

Finally, Maimon does not accept Kant's argument that an empirical derivation of a putatively *a priori* concept amounts to a revision, not an explanation. This argument, in effect, rules out any explanation of a judgmental practice that entails skepticism about that practice. Rather than weighing the consequences of a putative explanation, we should consider whether the explanation is a good one. As Maimon says, "It is a well-known proposition, which Newton lays at the foundation of his philosophy of nature, that one should assume no new principle for the explanation of a phenomenon, which may be explained from other, long since known principles."⁶⁰ If there is a good empirical explanation of the acquisition of the concept of cause — and Kant has not argued that there is not — then we should not throw away the explanation we have, in order to seek a transcendental explanation. But that is exactly what Kant does, just before he begins his Transcendental Deduction, when he assumes that the question *quid facti* has been answered because there can be no empirical derivation of the categories.

To what extent does this disagreement between Kant and Maimon depend on their fundamental difference of views about the demands of intelligibility? It seems likely that one could formulate

⁵⁹ See *KrU*, VII, 58, where Philalethes, Maimon's representative, responds as follows to the Kantian claim that the concept of causality in common usage involves the strict universality of a rule, and that a Humean empirical derivation would amount to a loss of the concept: "One cannot build with certainty upon the commonest use of the understanding. The [commonest usage] distinguishes itself excellently from the scientific use of the understanding insofar as the latter seeks the *ground* and the *mode of origination* of some given *knowledge*, [while] the former satisfies itself with this *knowledge in itself* and its application in common life; thus the common human understanding can deceive itself and believe itself to be in possession of a cognition which has no *objective ground*. As an example, you bring forth the proposition that all alterations must have a cause, and you say that the concept of cause would be wholly lost if one were to [explain] it as Hume did, etc., because it contains necessity and strict universality. But friend! Here you are doing the honourable Hume a great injustice. He derives from association of ideas and custom, not the *concept* of cause, but only its supposed *use*. Thus he doubts only its *objective reality*, since he shows that the common human understanding could have arrived at belief in the *use* of this concept through the confusion of the merely *subjective* and *comparatively universal* with the *objectively* and *absolutely universal*."

⁶⁰ *Strf*, IV, 239n..

the disagreement independently of the difference between dualism and monism. For it could be said that what is at stake is simply how to analyze causal judgments. Should scientific and ordinary causal judgments be given a uniform analysis, should that analysis involve the claim of necessary and universal connection among phenomena, and might the structure revealed by analysis misrepresent the synthesis by which we actually arrive at such judgments? It would seem that one may *raise* these questions, and reach conclusions different from Kant's, even if one *shares* his commitment to finite intelligibility, and even his dualism.

Nevertheless, I think it likely that the underlying differences between Kant and Maimon do in fact influence their *answers* to these questions. What grounds Kant's conviction that natural science employs just the notion of necessary connection discussed by metaphysicians and doubted by Hume, and that the ordinary and the scientific are not fundamentally distinct? And what grounds Maimon's conviction that natural science does not employ the disputed notion, and that the ordinary and the scientific are distinct?⁶¹

It seems likely that Kant's conviction is grounded in his espousal of genuine yet finite intelligibility. Kant is committed to an intelligibility that natural science can share with the ordinary practices generally derided by rationalists as merely finite. And, if finite intelligibility is to be genuine, as Kant believes it must, then, like infinite intelligibility, it must be grounded in universal and necessary principles. Of course, those principles will be *finitely* universal and *finitely* necessary principles — that is, principles that are universal and necessary, not absolutely, but relative to the possibility of experience, with its accidentally determinable spatio-temporal form.

On the other hand, it seems likely that Maimon's conviction is grounded in his commitment to infinite intelligibility as alone genuine. Given that conviction, one is likely to find it either improbable or impossible, that the all-too-finite, ordinary practices of explanation should be continuous with genuine science. Furthermore, as Kant himself shows in the Third Antinomy, there is a

⁶¹ Full answers to these questions would require detailed engagements with Kant's and Maimon's contrasting responses to Newton. See Freudenthal in this volume.

tension between the understanding's version of the principle of causal necessity and reason's version. The understanding's version says that "everything which *takes place* presupposes a preceding state upon which it follows according to a rule."⁶² That is, every determination has a sufficient reason *relative to that determination*. This version of the principle entails that series of causes will regress *ad infinitum*, thus that only *finite* intelligibility can be attained. In contrast, reason's version of the principle says that "nothing takes place without a cause *sufficiently determined a priori*."⁶³ That is, every determination has an *absolutely* sufficient reason. Hence series of causes will terminate non-arbitrarily, and *infinite* intelligibility can be attained. Kant's resolution of this antinomy depends, of course, precisely on his dualism about intelligibility. He can accept both versions of the principle by giving the understanding's version dominion within the realm of finitely intelligible phenomena, while giving reason's version dominion within the realm of infinitely intelligible noumena. But Maimon's commitment to infinite intelligibility as alone genuine makes it impossible for him to follow Kant's dualistic solution. So the antinomy gives him a principled reason for rejecting the idea that the finitary principle of causality is a principle of intelligibility at all, hence for rejecting the idea that the finitary principle of causality belongs in a genuine science of nature.

Thus, even someone who shares Kant's commitment to finite intelligibility may acknowledge the seriousness of Maimon's question *quid facti*, which Kant seems to have set aside too hastily. But someone who shares Maimon's rational dogmatism will not only raise the question *quid facti*. She will also think Kant incapable of answering it adequately.

V: *The Question Quid Facti: Part Two*

A Kantian may object as follows to the preceding attempt to show the seriousness of Maimon's question *quid facti*. To be sure, Kant says, before beginning the Transcendental Deduction, that skepticism is refuted by the fact of pure mathematics and natural

⁶² *CpR*, A 444/B 472, translated in Kant (1998), 484.

⁶³ *CpR*, A 446/B 474, translated in Kant (1998), 484.

science. Nevertheless, the argument of the Deduction as a whole provides independent grounds for excluding a Humean empirical derivation of the categories. For it is not a premise of the Deduction that we actually make judgments of experience, subsuming the sensuously given under some category. The relevant premise is rather that we have "some empirical knowledge", that we actually make synthetic *a posteriori* judgments that do not apply any category and that make no claims to necessity and universality.⁶⁴ Kant argues, in brief, that such judgments presuppose the transcendental unity of apperception — strikingly absent from the discussions of both Schultz and Maimon — which in turn requires principles for the unification of the sensuously given manifold provided only by the categories. Such an argument does not purport to refute the Cartesian skeptic.⁶⁵ But the argument does not obviously beg the question against the Humean skeptic by assuming any actual judgments of experience.

This is an important objection, because Maimon's reading of the Transcendental Deduction, as it stands, is obviously objectionable.⁶⁶ However, Maimon has *two* arguments to show that Kant has

⁶⁴ See Ameriks (1978), 282: "On this interpretation Kant's premise is not, as is often assumed, Newtonian and Euclidian, but is the relatively weak assumption of some empirical knowledge." Such an interpretation is suggested by Kant's examples (the perception of a house and of the freezing of water) at B 162. I am grateful to Ameriks for helpful discussion of this and related issues.

⁶⁵ Some might suggest that the refutation of skepticism is properly the task of the Refutation of Idealism, not of the Deduction. However, as I argue in Franks (forthcoming b), the Refutation of Idealism could not be a refutation of skepticism. For the Refutation of Idealism is a *reductio ad absurdum*. As Kant himself points out at A 791-2/B 819-820, no proof that $\sim p$ is absurd can prove that p , for p may also be reducible to absurdity. Indeed, if *both* $\sim p$ and p are reducible to absurdity, then the result is an antinomy and, if the antinomy cannot be resolved, the appropriate response is skepticism.

⁶⁶ However, a similar reading has been given considerable weight in Guyer's extensive discussion of the Deduction. See Guyer (1987), 85, where a classification of forms of the Deduction is given, and where form IA is said to be exhibited by arguments or interpretations maintaining that, "Judgments about empirical objects are possible, and these actually contain some synthetic *a priori* knowledge which implies the *further a priori* knowledge of he categories." Thus, Maimon's interpretation is an example of form IA, while the form of argument recommended in the Kantian objection considered here is Guyer's IB: "Judgments about empirical objects are possible, and although these do not themselves *assert* any claims to *a priori* knowledge, they do *presuppose a priori* knowledge." So it is noteworthy that Guyer (1987), 121-124, argues that some versions of IB collapse into IA.

begged the question *quid facti*, and we have so far considered only one. In the *Letters to Aenesidemus*, Maimon writes, "I am skeptical . . . about the empirical employment of the categories on two grounds: In the first place, because of the possibility . . . of explaining this alleged employment subjectively, as Hume does; and further, because with respect to empirical objects we lack the ground required for the employment of the categories, that is, insight into the relationship of determinacy . . ."67 Maimon's second argument does not depend on the disputable claim that Kant assumes the actuality of judgments of experience as a premise. For even if Kant assumes only the actuality of some empirical knowledge, without any claims of universality and necessity, he surely wishes, in the argument of the Analytic of the whole, to show that the principles presupposed by that knowledge *render judgments of experience possible*. But Maimon's second argument, if correct, can be taken to entail that even if we actually have some empirical knowledge that presupposes categorical principles, the presupposed principles are nevertheless indeterminate, and cannot be rendered determinately applicable to the sensuously given in particular judgments of experience. Thus it is the Analytic of Principles, rather than the Analytic of Concepts containing the Transcendental Deduction, that is directly threatened by Maimon's second argument. Still, if the Analytic of Principles yields only indeterminate principles, then the Deduction seems to accomplish less than we hoped for — less than a demonstration of the objective reality of the categories, of their applicability to determinate, sensuously given objects.

In the Second Analogy, Kant argues that the possibility of judging that some successions of perceptions are not subjective but objective — that they express, not just events in the mental life of the subject, but events in the careers of objects — depends on the assumed principle that every event presupposes something from which it follows according to a rule. Thus the *a priori* assumption of the principle of causality plays a crucial role: it makes synthetic *a posteriori* judgments of objective succession possible. But Maimon argues that Kant has not shown that, in order to distinguish objective from subjective successions, we actually need to *apply* — or even that we need to be *able* to apply — the concept of causality to

67 *Logik*, V, 495-6.

given objects. Kant has shown only that we need to assume that every event has some indeterminate cause. He has not shown that we need to *assign* any determinate cause to any event. Nor has he shown *how we could* assign any determinate cause. Maimon is prepared to endorse some version of Kant's argument, and is even prepared to argue that the mere perception of *subjective* succession presupposes a version of the principle of causality.⁶⁸ But he does not think that Kant's argument shows either the necessity or the possibility of determinate applications of the principle in causal judgments.

Now Maimon's point is of great importance, and has only recently attracted the attention of interpreters of Kant's Second Analogy, without Maimon receiving any credit.⁶⁹ But the extent to which it counts against Kant is unclear, because it is a point of which Kant himself — unlike some of his interpreters — is fully aware. Thus Kant says, "there is an order among our representations, in which the present one (insofar as it has come to be) points to some preceding state as a correlate, to be sure still undetermined, of this event that is given, which is, however, determinately related to the latter, as its consequence, and necessarily connected with it in the temporal series."⁷⁰ And Kant is no less explicit in his statement that determinate causal judgments require determinate experiences, not the causal principle alone: "Now how in general anything can be altered, how it is possible that

⁶⁸ This strengthening of the Second Analogy seems licensed by the Refutation of Idealism. For Kant argues there that consciousness of myself as determined in time, which presumably involves the ability to judge the temporal order of subjective states, requires perception of some permanent. As perception of something subject to objective alterations, perception of some permanent must be the kind of perception shown in the Second Analogy to presuppose the causal principle. However, Maimon's version of the Principle of Causality differs from Kant's, and depends on Maimon's claim that the natural-scientific conception of causality is a conception of continuity. See Bergmann (1967), 127-137.

⁶⁹ See Buchdahl (1969), 649-650. One may accept the idea that the Second Analogy argues only for an indeterminate version of the causal principle without accepting Buchdahl's controversial claim that it is arguing only for the principle that every event has some cause, not for the principle that every event of the same type has a cause of the same type. For criticism of Buchdahl's claim, see Friedman (1992b). Although Allison (1996) defends his version of the Buchdahl interpretation against Friedman, he concedes in effect that the principle at stake is that every event of the same type has a cause of the same type.

⁷⁰ *CpR*, A 198-9/B 244, translated in Kant (1998), 310.

upon a state in one point of time an opposite one may follow in the next — of these we have *a priori* not the least concept. For this acquaintance with actual forces is required, which can only be given empirically, e.g., acquaintance with moving forces, or what comes to the same thing, with certain successive appearances (as motions) which indicate such forces.”⁷¹ But this is mysterious, since Kant insists on the impossibility of arriving at any genuinely causal judgment by induction from experiences. As Michael Friedman has emphasized, Kant’s *full* story about how we arrive at determinate causal judgments requires, not only the Analytic of Principles, but also the account of the mathematization of appearances in Kant’s *Metaphysical Foundations of Natural Science*.⁷² In Kant’s own words: “. . . a separate metaphysics of corporeal nature does excellent and indispensable service to *general* metaphysics, insofar as the former furnishes examples (instances *in concreto*) in which to realize the concepts and propositions of the latter (properly transcendental philosophy), that is, to provide a mere form of thought with sense and meaning.”⁷³ So Kant concedes Maimon’s claim that, the result, not only of the Transcendental Deduction, but also of the Analytic of Principles, is nothing more than categorial principles that are, to be sure, necessary conditions of possible experience, but only as “mere forms of thought”, without determinate “realizations”. But he also promises to make up for this merely formal result in his account of the metaphysical foundations of mathematical physics.⁷⁴

⁷¹ *CpR*, A 207/B 252, translated in Kant (1998), 314.

⁷² Friedman, (1992a), 136-164; (1992b). As Friedman emphasizes in (1992a), 165-210, the task of the Phenomenology chapter of Kant’s *Metaphysical Foundations of Natural Science* is to transform “appearance”, which Friedman identifies with the *Prolegomena*’s judgments of perception, into genuine “experience.” See Kant, AA, IV, 555; Friedman (1992a), 142, 144, 169, 184-5.

⁷³ Kant, AA, IV, 478, translated in Kant (2002), 192.

⁷⁴ To be sure, in *Metaphysical Foundations of Natural Science*, Kant sets himself the extremely demanding — perhaps impossible — task of showing that, although the laws of physics depend, not only on synthetic *a priori*, metaphysical principles that are more determinate versions of transcendental principles, but also on empirical phenomena, these laws are *a priori*. See Friedman (1992b), 178: “When these [metaphysical] principles are applied to our given initial ‘phenomena,’ however, the law of universal gravitation results uniquely and deductively: There is no *further* room, that is, for inductive or hypothetical underdetermination or uncertainty.” For Maimon’s response to Kant’s undertaking, see Freudenthal in this volume.

Still, Maimon's point suggests two objections to Kant. First, given Maimon's commitment to infinite intelligibility as alone genuine, he is unlikely to accept the Kantian assumption that Newtonian physics is genuine science, because genuine science must meet the high standards of infinite intelligibility. Kant, however, will have reason to set aside this objection, as exhibiting Maimon's blind-spot to the innovative notion of finite intelligibility exemplified by Newtonian physics. But, second, even if Kant can show that Newtonian physics is genuine science, he must do so by showing the genuineness of the Newtonian mathematization of the sensuously given, since "a doctrine of nature will contain only as much proper science as there is mathematics capable of application there."⁷⁵ If judgments of experience are shown to be possible only through a proof of the possibility of mathematization — as, it now seems, both Kant and Maimon agree — then how are ordinary — non-mathematical — judgments of experience possible? How can the determinate causal explanations we give in everyday life count as actual judgments of experience, or as grounded in the categorical principle of causality?

This second objection may surely be raised even by someone who shares Kant's commitment to finite intelligibility. However, one's sense of the *weight* of the objection may depend on what one thinks about intelligibility. Kant seems to assume, without argument, that, since ordinary and scientific judgments are made against a background of finite intelligibility, they are based upon the same background principles, and the ordinary judgments are less sophisticated versions of the scientific judgments, so that the validity of the scientific judgments is sufficient to guard the ordinary judgments against Humean skepticism. In contrast, Maimon seems to assume that, since scientific judgments are only possible on the basis of principles of infinite intelligibility, ordinary judgments could not possibly share that basis, so that Kant's demonstration of the possibility of scientific judgments — even if successful — cannot refute Humean skepticism about ordinary causal judgments.

⁷⁵ Kant, AA, IV, 470, translated in Kant (1998), 186.

VI: *Conclusion*

To what extent, then, is Maimon's empirical skepticism driven by his rational dogmatism?

In Maimon's discussions of the question *quid juris*, rational dogmatism leads directly to a twofold empirical skepticism, by insisting that genuine knowledge must meet the standards of infinite intelligibility exemplified by pure mathematics. Scientific knowledge is rendered problematic, since it is possible only to the extent that it is fully mathematized, which is open to doubt. Ordinary knowledge, however, is rendered impossible, since the mathematization would deprive ordinary practices of their ordinariness.

In Maimon's discussions of the question *quid facti*, rational dogmatism leads to empirical skepticism insofar as it makes two objections to Kant's procedure unanswerable. Given a commitment to infinite intelligibility alone, Kant is unable to justify two assumptions: first, that we actually make judgments of experience that cannot be explained empirically and second, that the success of scientific judgments of experience refutes empirical skepticism about ordinary practices of explanation.

To the extent that Maimon's empirical skepticism is driven by his rational dogmatism, Kant has a readily available response to that skepticism. For, although Maimon's rational dogmatism is a creative reinterpretation of the rationalist conception of infinite intelligibility, informed by developments in modern mathematics and physics, it is nevertheless affirmed by Maimon without any serious engagement with Kant's innovative conception of finite intelligibility. Maimon has a blind-spot when it comes to this conception, as is shown by his uncharitable interpretation of Kantian dualism as a new version of Cartesian dualism. Seen in this light, the contest between Maimon and Kant is a contest between two programs, based on different fundamental presuppositions, each of which claims to account for the process of mathematization.

However, this does not imply that Maimon's arguments for empirical skepticism leave Kant wholly untouched. His discussions of the question *quid facti* raise issues that should be taken seriously even if one shares Kant's commitment to finite intelligibility. How are causal judgments to be analyzed? If the analysis shows that they purport to make universal and necessary claims, and that

skepticism would follow from an empirical explanation of how such judgments are arrived at, may empirical explanation be rejected out of hand? Are ordinary practices of judgment continuous with scientific practices? The answers one gives to these questions have great significance for one's assessment of Kant's central arguments. Yet Kant's own answers seem to be given without argument and without due consideration of the alternatives.

In the still continuing debate about whether Kant's first *Critique* is intended to account for ordinary or for scientific practices of judgment, Maimon is the pioneer of scientifically oriented interpretation.⁷⁶ I believe that Kant himself intends his transcendental principles to be principles underlying the possibility of *both* ordinary *and* scientific practices of judgment.⁷⁷ But reflection on Maimon has the virtue of bringing out unremarked difficulties confronting a Kantian account of ordinary judgments. First, it becomes clear that Kant's response to skepticism about ordinary judgments ultimately depends on his ability to show that a successful, mathematical science of nature is grounded in the principles of transcendental philosophy, as well as on the assumption that science is continuous with the ordinary. Second, even on Kant's own view, one cannot reasonably hope to ground *all* ordinary judgments through the success of a mathematical science of nature. After all, Kant does not believe that either biology or psychology will ever become genuine — that is, mathematical — sciences, and it surely follows that Kant could not hope to ground ordinary judgments about organisms or about human motivation in the way he hopes to ground ordinary judgments about physical objects. Consider, also, ordinary judgments about what we might call, not physical, but *cultural* objects, like tables and chairs. Since our concepts of these objects depend in part on human biology, psychology and history, there can presumably be no hope of grounding

⁷⁶ This kind of interpretation has been developed by Marburg Neo-Kantians and more recently by Körner (1955). In contrast, the Anglophone tradition represented by Strawson (1966) assumes that the *Critique of Pure Reason* is intended primarily or solely as a transcendental account of ordinary experience. On the dispute, see Buchdahl (1969), Allison (1996) and Friedman (2001).

⁷⁷ See Ameriks (2000), 45: ". . . Kant's philosophy is unique in focusing on a level 'in between' the domains of ordinary empirical judgment and theoretical science."

judgments about *these* objects in principles of mathematical physics.⁷⁸ What, then, secures ordinary judgments of this kind, which are not continuous with judgments of exact science even in Kant's view, against empirical skepticism?

I do not say that Kant definitely *lacks* the resources to account for ordinary practices of judgment. But consideration of Maimon's arguments shows at least that Kant's *theoretical* philosophy does not *provide* those resources. Indeed, it is striking that, although Kant was deeply concerned to show how the metaphysical principles of *natural science* are grounded in the principles of transcendental philosophy, he does not seem to have been similarly concerned to show how the metaphysical principles of *ordinary* practices of judgment are transcendently grounded. A full Kantian account of ordinary practices of judgment — if one is possible — must draw, not only on the *Critique of Pure Reason*, but also on the *Critique of Practical Reason* and the *Critique of Judgment* and, indeed, on lines of thought that Kant never fully developed. This point has been lost on an entire tradition of English-language Kant interpretation, which has interpreted the *Critique of Pure Reason* as a transcendental account intended to show, on its own, the possibility and safety from skepticism of ordinary practices of judgment. It follows that Maimon's program is not only worth consideration in its own right, as an account of the possibility of mathematization that rivals Kant's. It is also worth careful study as an indication of the difficulties confronting any Kantian attempt at a transcendental account of the ordinary.

⁷⁸ On this point, among others, I am indebted to conversations with Michael Friedman.

MAIMON AND FICHTE

FREDERICK BEISER

1. *The Question of Maimon's Influence*

That Maimon had a great influence on Fichte there can be no doubt. For Fichte himself made no secret of his debt to Maimon. It was through reading the new skeptics, "especially the excellent Maimonian writings", he wrote, that he became convinced that philosophy is not yet a science.¹ On several occasions he insisted that it is unwise to ignore Maimon's challenge to the critical philosophy, and that any attempt to rebuild it on a new foundation would have to answer his skepticism.² Though he did not mention his name, he once referred to Maimon as "one of the greatest thinkers of our age."³ Finally, in his March/April 1795 letter to Reinhold, Fichte paid handsome tribute to Maimon:

My respect for Maimon's talents knows no bounds. I firmly believe that he has completely overturned the entire Kantian philosophy as it has been understood by everyone until now, including you, and I am prepared to prove it. No one noticed what he had done; they had looked down on him from their heights. I believe that future centuries will mock us bitterly.⁴

Although Fichte's debt to Maimon is well known, it cannot be said that it has been well understood. We know only *that*, but not *how*, Maimon had an influence upon Fichte. The most basic questions lack clear answers. What challenge did Maimon pose for Fichte? How did Fichte respond to it? And were his responses effective? These are difficult questions, partly because Fichte himself does

¹ See, for example the preface to the first edition of *Ueber den Begriff der Wissenschaftslehre*, *SW*, I, 29.

² See, *Grundlage*, *SW*, I, 120n. See also the fragment 'Wer Hume, Aenesidemus wo er recht hat, u. Maimon noch nicht verstanden [...]', *GA*, II/3, 389-90.

³ See the *Grundlage*, *SW*, I, 227. That Fichte has Maimon in mind is apparent from another later reference to him. See *Grundriß des Eigenthümlichen der Wissenschaftslehre*, *SW*, I, 387.

⁴ Fichte, *GA*, III/2, 282.

not answer them in any detail, and partly because his few remarks about Maimon are very sketchy or vague. Maimon himself sheds little light on these questions, because he never discusses Fichte's response to his skepticism.⁵ In any case, he never entered into any dispute with Fichte, as he once did with K.L. Reinhold and G.E. Schulze, about the foundations of the critical philosophy.

There is not a little at stake in trying to explain Maimon's influence on Fichte. No one questions the central role of Fichte's 1794 *Wissenschaftslehre* in the rise of German idealism. But, according to Fichte himself, Maimon's skepticism was crucial for the development of the *Wissenschaftslehre*. Hence if we uncover the role of Maimon's skepticism in Fichte's philosophical development we will have a better understanding of the genesis of German idealism itself. Maimon's seminal importance for German idealism — a fact so often stressed that it has become a virtual cliché — will finally take on a more concrete meaning.

For these reasons, it is surely worthwhile to reexamine the question of Maimon's significance for Fichte. The aim of this study is to clarify Maimon's challenge to Fichte and how Fichte attempted to meet it. Its results can be summarized in three propositions. First, Maimon's challenge for Fichte came from his critique of Kant's Transcendental Deduction. This critique consists in an immanent critique of transcendental idealism, and it should not be confused with G.E. Schulze's attack upon the Deduction, which presuppose transcendental realism. Second, Fichte developed two strategies against Maimon's challenge, one more plausible than the other. The less plausible strategy derives from his transcendental psychology, and more especially his theory of the productive imagination; the more plausible strategy comes from his pragmatism, and more specifically his belief that knowledge is the result of moral action. Third, the foundation of Fichte's pragmatic response to Maimon had already been suggested by Maimon himself.

⁵ In general, Maimon seems to have had a negative opinion of Fichte's philosophy, which he dismissed as a "logical egoism". See his May 24, 1800, letter to Bendavid, in Guttman (1917), 210-1. (I am grateful to Yitzhak Melamed for this reference). See also, however, his November 7, 1800, letter to Peina, in VII, 567-71, where Maimon seems more sympathetic to Fichte.

2. Maimon's Challenge

Maimon's central challenge for Fichte came from the very heart of his "critical skepticism": its critique of the Transcendental Deduction. The essence of Maimon's critique is that Kant cannot solve the problem behind the Deduction — 'How do a priori concepts apply to experience if they do not derive from it?' — because of his rigid and sharp dualism between understanding and sensibility. According to Kant, knowledge of experience arises from two distinct faculties: the *understanding*, which spontaneously generates universal and necessary concepts; and *sensibility*, which receives particular and contingent intuitions from the senses. While these concepts provide experience with its *form*, the intuitions supply it with its *matter*. Kant stressed that knowledge requires the most intimate interchange between these elements: concepts without intuitions have no content or reference; and intuitions without concepts have no structure or meaning; as he put it in a famous dictum: "Concepts without intuitions are empty, intuitions without concepts are blind." Yet the problem of the Transcendental Deduction arose because each of these elements derive from such distinct sources. If concepts arise a priori from the understanding, and if intuitions come a posteriori from sensibility, then what guarantee is there that these concepts apply to these intuitions? In short, what makes a priori concepts apply to experience if they do not derive from it?

According to Maimon, the very dualism that was the source of Kant's problem was also the main obstacle to its solution. The gulf between understanding and sensibility — at least in the absolute terms in which Kant formulated it — is simply unbridgeable, so that the interchange between them necessary for knowledge is all but impossible. Maimon gave several reasons why the dualism is insurmountable; each of them deserves separate explanation.

The most striking problem posed by Kant's dualism, Maimon argued, is that it seems impossible for such heterogeneous faculties as understanding and sensibility to interact with one another.⁶ The understanding is a purely intellectual faculty, which is active and beyond space and time; and sensibility is a strictly empirical

⁶ See Maimon's *Tr*, II, 62-5, 182-3, 362-4.

faculty, which is passive and within space and time. But if these faculties are so unlike, then how do they interact with one another? On the one hand, they *must* interact if there is to be that close cooperation between them necessary for knowledge: the understanding must act upon sensibility because it has to organize intuitions according to concepts, making their raw content take on definite shape and form; and sensibility has to act upon understanding, providing it with the material to form and synthesize. Yet, on the other hand, it also seems that they *cannot* interact because they belong to different realms: understanding to the noumenal world, and sensibility to the phenomenal. To Maimon, the problem here seemed analogous to, and reminiscent of, the Cartesian mind-body problem. It seemed as if Kant had simply replaced Descartes' heterogeneous substances with his own discrete faculties. Thus the mind-body problem, which had so haunted seventeenth century philosophy, seemed to sneak in through the backdoor of the critical system. The mind and body of Descartes, Spinoza, and Leibniz had simply been replaced by the noumenal understanding and phenomenal sensibility of Kant.

Another problem raised by Kant's dualism is that it seems impossible *to know* when, and indeed whether, the a priori concepts of the understanding apply to the a posteriori intuitions of sensibility. The concepts of the understanding are so abstract and general that they do not necessarily ensure order among the specific intuitions of our actual experience; indeed, they seem to be compatible with the complete absence of order, with that haphazard and arbitrary phantasmagoria that Kant so deeply feared. Maimon made this point clear by arguing that Kant could not provide a *criterion* to determine whether the categories apply to any specific intuitions.⁷ The category of causality, for example, is compatible with all kinds of specific empirical laws; it tells us that experience must conform to causal laws, such that there must be a sufficient reason for each event. But it does not tell us *which* events are causes; it is as compatible with smoke being the cause of fire as fire being the cause of smoke. Hence if we want to know which specific events illustrate the category of causality, we must consult experience. But, Maimon then insisted, experience really cannot

⁷ See Maimon's *Tr*, II, 187-8, 370-3; and his *Logik*, V, 489-90.

help us either. For, as Hume pointed out and Kant conceded, all that experience ever shows is constant conjunction, not universal and necessary connection. This means that, in any specific case, we cannot be sure that the category of causality really does apply to our experience. Even if we see that smoke always follows fire, we cannot infer that smoke is the cause of fire, because all that we have evidence for from our experience is a constant conjunction between fire and smoke. So, even if we know *ex hypothesi* from the Deduction that the category of causality applies to experience, we do not know that it applies in this, or indeed in any specific case. Even if we know *that* the categories apply, we will never be able to determine when and where they do so. But that leaves the disturbing question: if we cannot know *when* and *where* they apply, do we really know *that* they apply?

On these grounds Maimon dismissed the schematism as a plausible solution to the problem of the application of the categories.⁸ In the 'Schematism' chapter of the first *Kritik* Kant had addressed this very issue by developing the idea of a schema or monogram that mediates between the categories of the understanding and the intuitions of sense. What allows us to apply the category to experience, Kant maintains, is the a priori form of inner sense, time. This faculty determines the concept's application by assigning it a temporal significance; for example, the category of cause applies to temporal sequences where the cause is that which precedes and the effect that which follows. Assigned such a schema or temporal significance, the category of causality becomes compatible with only certain sequences, since, for example, fire always precedes smoke in time. But, Maimon retorts, this still does not provide a sufficient criterion. Again, the problem is that all the evidence of my senses does not warrant the application of this category. If I constantly observe fire preceding smoke, this still does not justify applying the category of causality, which attributes a universal and necessary connection between fire and smoke. There is no means, then, of distinguishing cases where there is only a contingent constant conjunction from those where there is a universal and necessary connection. Although Kant is right to think that the application of a category requires knowing its

⁸ See Maimon, V, 191-2.

temporal schema, he is wrong to conclude that this is a sufficient condition of its application, since knowing the temporal schema alone does not justify applying the category.

Such, in rough outline, was the challenge Maimon had laid down for Fichte sometime in the early 1790s. It is clear that it poses an even greater threat to Kant's philosophy than the skepticism of G.E. Schulze, which had simply presupposed the standard of truth characteristic of transcendental realism. According to Schulze's skepticism, Kant cannot justify our knowledge because he cannot satisfy the normal standard of truth, the correspondence of a representation with a thing-in-itself. It was just this standard of truth, however, that Kant had questioned in the Transcendental Deduction. Maimon rightly saw that such a standard of truth simply begged the question against Kant, and so he chastened Schulze for his implicit "dogmatism".⁹ Maimon's skepticism poses a deeper danger because it shows that there is still reason to doubt the possibility of knowledge *even if we adhere to the standard of truth of the critical philosophy itself*. Assuming with Kant that truth consists not in the correspondence of a representation with a thing-in-itself but in the conformity of intuitions with rules, the problem still arises of how we know that these rules ever do apply to these intuitions. It is possible that all of our experience is illusory because Kant does not provide sufficient reason to think that it conforms to the categories, which provide the formal conditions of all empirical reality. The nightmare of nihilism — the possibility that our representations represent nothing at all — now recurs even when we accept the Kantian account of representation as the conformity of intuition with rules. Hence Maimon's critique of Kant, unlike Schulze's, is purely internal. Its ultimate — and very dangerous — message is that the critical philosophy cannot solve the problem of knowledge even when it is formulated in its own terms.¹⁰

⁹ See Maimon's 'Briefe des Philaletes an Aenesidemus', in his *Logik*, V, 358-9.

¹⁰ This point has been rightly stressed by Cassirer (1974), 89-96. It has sometimes been lost sight of. Daniel Breazeale (1991) provides an account of Fichte's reply to Schulze and Maimon that fails to see the fundamental difference between Maimon's and Schulze's skepticism. He completely misses, therefore, the purport of Fichte's reply to Maimon. The same failure vitiates Wayne Martin's account of Fichte's Jena project in his *Idealism and Objectivity* (1997). According to Martin, Fichte is not concerned with problems of skepticism because he does

Thus the ultimate challenge of Maimon's skepticism — for Fichte, and indeed the whole post-Kantian generation — was how to bridge the gap between understanding and sensibility, noumena and phenomena. If it were not possible to surmount Kant's dualisms, to find some synthesis or middle term between them, then the skeptical problem remained unsolved, so that the whole realm of experience could be an illusion. The predicament of Fichte, and indeed the whole post-Kantian generation, was perfectly summarized by Maimon himself: "Philosophy has not been able to build a bridge that makes possible the transition from the transcendental to the particular."¹¹

3. *Fichte's First Line of Defense*

Fichte's official account of his reply to Maimon appears in some brief and dense passages from two pivotal works of the Jena years, the *Grundlage der gesamten Wissenschaftslehre* and the *Grundriß des Eigenthümlichen der Wissenschaftslehre*.¹² The thrust of his reply is that Maimon too is guilty of his own form of dogmatism. Like Schulze, Maimon assumes that the categories must apply to some object independent of them, though in his case the object is something given in experience rather than a thing-in-itself beyond it. According to Fichte, Maimon ascribes our belief that the categories apply to experience to a mere illusion of the imagination. We have no evidence from reason or experience that the categories do apply to our sense impressions; but because we are so accustomed to associating these impressions, we imagine something corresponding to them in the world outside us. The proper response to this argument, Fichte contends, is to question the premise that the object is given independent of the activity of the imagination. Maimon fails to appreciate the creative power of the imagination,

not attempt to demonstrate the existence of objects outside us in the sense of transcendental realism (Martin (1997), 17-8); but this does not recognize the special challenge of Maimon's skepticism, which remains within the Kantian boundaries of experience and concerns only the problems of the application of a priori concepts to sense intuitions.

¹¹ See Maimon, *Strf*, IV, 38.

¹² Cf. Fichte, *Grundlage*, SW, I, 99, 101, 120, 227 & *Grundriß des Eigenthümlichen der Wissenschaftslehre*, SW, I, 387-9.

which produces not only the schemata for the application for the categories, but also the objects of experience themselves.

Fichte concedes that this is in effect to admit the skeptic's case: that we have no reason to believe that our concepts apply to an object independent of them. But he still insists that we do not have to accept the skeptic's conclusion that all of our experience consists only in an illusion. This is because we do not have to admit the skeptic's premise: that there is some given object to which our concepts have to conform. All of our experience is the work of the imagination, and indeed all reality depends upon it, Fichte argues, so that there is no criterion of truth outside it to which we can appeal. Illusion must be opposed to truth, and illusion must be avoidable; but the activity of the imagination provides the rule of truth, and its activity is inescapable. We can no more doubt the reality of the productive imagination, Fichte insists, than we can doubt the reality of our existence, because the activity of the imagination is a necessary condition of our own self-consciousness.¹³

Fichte's argument against Maimon alludes to, and indeed presupposes, his account of the productive imagination in the *Grundlage* and *Grundriß*. This faculty plays a pivotal role in Fichte's analysis of experience. Imagination is that faculty which unites the two fundamental elements of all experience: form and matter.¹⁴ It engages in the infinite task of attempting to create order out of chaos, of striving to determine the infinitely determinable matter of sensation. Although no single determination is ever completely adequate to this matter, precisely because it is infinitely determinable, the imagination still attempts to determine it anew, forever creating new forms, and so making experience increasingly more determinate and comprehensible. To the extent that it determines the matter of sensation, making it conform to its a priori forms, the imagination *internalizes* it, making it part of consciousness; but to the extent that it cannot determine this matter, it is "repelled" by it and *externalizes* it, seeing itself as limited by something *outside* itself. The imagination is "the hovering" (*Schweben*) between these two tendencies: internalizing the matter and making it submit to

¹³ Fichte, *Grundlage*, SW, I, 227.

¹⁴ *Ibid.*, I, 215-7.

some form; and externalizing it because it cannot completely dominate and control it.

In the *Grundlage* and *Grundriß* Fichte ascribes enormous powers to the imagination. All reality is produced by it, making possible "all consciousness, all life, and our being for ourselves, that is, our being as ego".¹⁵ It is indeed only because of the imagination that we have an awareness of the external world. In a section entitled 'The Deduction of Representation' in the *Grundlage* Fichte explains how intuition, or the representation of something outside ourselves, is essentially the product of the imagination.¹⁶ Fichte thinks that Kant was profoundly correct to suggest the fundamental role of the imagination in the constitution of our experience; he went astray, however, in limiting its role to producing the schemata alone when it also creates the very objects we know.

Prima facie Fichte's reply to Maimon works only by presupposing some rather speculative transcendental psychology and some even more extravagant transcendental idealism. It seems that Fichte intends to defeat Maimon by a more radical idealism which makes the productive imagination responsible for not only the form but also the content of experience. If this is the case, then Fichte has engaged in a very high risk strategy indeed, since Maimon only has to doubt the apparently fanciful claim that the imagination produces all of reality.

Such a counterargument would be much too hasty, however. To be fair to Fichte, it is important to see exactly what role he ascribes to the productive imagination. He is not as extravagant as he first appears. Contrary to one very popular interpretation, Fichte does not hold that the imagination creates *ex nihilo* the entire world, as if nothing exists prior to its act of creation. This would be a metaphysical hypothesis, for which Fichte believes we have no warrant. He constantly stresses how we, as finite beings, are limited by a reality external to ourselves, which is simply given to us, and that an idealism is transcendent or dogmatic when it fails to acknowledge such a reality.¹⁷ Fichte is also not claiming that the imagination

¹⁵ Ibid., I, 227.

¹⁶ Ibid., I, 232-3.

¹⁷ On the theme of finitude, see *Grundlage*, SW, I, 253, 354-5, 270, 275; and on the critique of dogmatic idealism, see *Grundlage*, SW, I, 155-6, 173, 175, 178, 186, and the *Wissenschaftslehre nova methodo*, GA, IV/2, 33-4, 55, 128, 141.

somehow creates the entire content of experience — that it literally produces the matter of sensation — because he is explicit elsewhere that the feelings or sensations that make up the primitive qualia of experience are somehow given.¹⁸ He assumes that the imagination is limited by something infinite — the infinitely determinable content of sensation — that it cannot entirely control;¹⁹ and it is indeed partly for this reason that it externalizes its object as something outside itself. What the imagination does create for Fichte is the *object of experience*, that is, the object as it is perceived according to the forms of sensibility and understanding. While all the determinations of the object of experience are created by the imagination, the matter of experience, the raw unsynthesized sensations or feelings that do not come to consciousness, remain simply given.

According to this more modest reading of Fichte's concept of imagination, then, Fichte's reply to Maimon does not commit him to any extravagant metaphysical assumptions; more specifically, it does not presuppose an absolute ego which somehow creates the entire world or the matter of experience. To defeat Maimon, Fichte needs to assume only that *the object of experience* is entirely created by the imagination. If this is the case, then the skeptical problem disappears, because there is nothing to the object of experience which is given prior to synthesis. While the object in itself — the matter of sensation prior to its synthesis — remains unknowable to us, this poses no problem for knowledge of experience. Indeed, as we have already seen, Maimon himself admits that the problem of knowledge does not arise from the difficulty of knowing whether our representations conform to things-in-themselves.

Nevertheless, although this interpretation makes Fichte's reply to skepticism more plausible, it remains doubtful whether it would satisfy Maimon. For the question still remains: how do we know that the imagination creates the object of experience? What shows that the object we perceive conforms to universal and necessary forms of experience? Again, as Hume argued and Maimon reiterated, we cannot appeal to the content of experience itself, to the

¹⁸ See *Grundlage*, SW, I, 297-301, 313-4; and the 'Vorrede zur ersten Ausgabe' of *Ueber den Begriff der Wissenschaftslehre*, SW, I, 29n.

¹⁹ Fichte, *Grundlage*, SW, I, 215.

world as we perceive it, because that only reveals a constant conjunction. What Fichte must establish is that all the empirical characteristics of an object are somehow necessary conditions of self-consciousness; but, clearly, that is a proof of a very tall order, which any skeptic will find plenty of reasons to doubt. Indeed, Fichte himself doubted whether such a transcendental deduction of the more general features of experience is possible.²⁰

4. *The Final Line of Defense*

So far it seems as if Fichte's response to Maimon is very weak. Even if Fichte's case does not presuppose a metaphysics, it still rests upon a transcendental psychology which begs skeptical questions. Fichte does have a point: if the transcendental imagination does create the object of experience, then Maimon has no reason to question whether the concepts of the understanding apply to intuitions. But the problem remains the conditional: what reason do we have to assume that the imagination does this? Here again Maimon could raise his dreaded *quid facti*?

It would be a serious mistake, however, to leave things here, as if this were the end of the matter. For Fichte has another strategy, another line of defense against Maimon's skepticism, which is much more promising and interesting. Both strategies stress the fundamental role of activity in the creation of the knowledge of experience; both are opposed to an empiricist conception of knowledge which sees the mind as passively receiving a given object. Nevertheless, there is a fundamental difference between these strategies. While the first stresses the role of the imagination, and so falls within the realm of *theoretical* reason, the second stresses the role of moral activity or striving, and so comes under the rubric of *practical* reason.

Fichte began to develop his second strategy in the Winter of 1793/94 in his two notebooks *Eigne Meditationen über Elementar Philosophie* and *Practische Philosophie*, whose themes reappear in the third part of his 1794 *Grundlage der gesammten Wissenschaftslehre*. Although Fichte rarely directly discusses Maimon in these works,²¹

²⁰ See the 'Zweite Einleitung in die Wissenschaftslehre', *SW*, I, 476-7, 489.

²¹ There is a reference to Maimon in the *Eigne Meditationen über Elementar*

he is still grappling with the main problem posed by his skepticism: how can we establish knowledge of an objective world? What is most striking of all, however, is that Fichte's response to skepticism was already formulated by Maimon himself. It is indeed not implausible to hold that, in this regard, Fichte was influenced by Maimon, even though the evidence is rather circumstantial, resting entirely on the similarity of some of their ideas.²² But, whether there was an actual historical influence or not, there is no denying the profound affinity between Maimon's and Fichte's thinking about both the problem and solution of skepticism. There is indeed a deep irony behind this affinity: Maimon anticipated, even if he did not inspire, Fichte's response to Maimon's skepticism!

To understand Fichte's final line of reply, it is best to return to Maimon's formulation of the problem of knowledge in one of his lesser known works, his 1791 *Philosophisches Wörterbuch*.²³ Here Maimon summarized the whole dilemma facing the critical philosopher in terms of "a universal antinomy of thought". According to this antinomy, there are two conflicting but necessary requirements of all thinking. On the one hand, thought must have something given, a subject matter or object to think about, because thinking essentially consists in the application of something universal (a rule of the understanding) to something particular (the matter of sensation). On the other hand, though, the perfection of thought demands that nothing is given and that everything be

Philosophie, GA, II/3, 23-24n. It has been argued, however, that this is really a slip of the pen because the source of the views under discussion is Schulze rather than Maimon. See Kabitz (1912), 62n2; Kabitz's views have been endorsed by Stolzenberg (1986), 16. Yet Maimon was concerned with substantially the same issue that is under consideration in these passages: how does the transcendental philosopher know that his propositions are true of consciousness itself? This was indeed the central thrust of Maimon's critique of Reinhold, which appeared in his *Streifereien im Gebiete der Philosophie*. See the detailed reference in GA, II/3, 23n1. For the details of Maimon's dispute with Reinhold, see Beiser (1987), 317-20.

²² In her interesting article Violetta Waibel (1996) has made a strong case for the influence of Hölderlin on the development of Fichte's 1794 *Wissenschaftslehre*. However, her argument is still compatible with the suggestion here. If Maimon did influence Fichte, it would have been much earlier, indeed before the Jena years in the Winter of 1793/94.

²³ See Maimon, III, 186-7, 193.

created and pure form. With the first horn of this dilemma, Maimon wished to express the point that our human understanding is finite, that it creates the form but not the content of our experience, which is simply given. With the second horn, he formulated the ideal of knowledge already implicit in Kant: that we know perfectly only that which we create, a noumenon produced by the activity of the understanding alone. The antinomy therefore points out the vast discrepancy between our ideal of knowledge and our *de facto* condition as finite beings: knowledge demands creating an object, making it something purely intelligible or noumenal; but objects are given to us as something empirical or phenomenal. The ideal of knowledge therefore seems reserved for the *intellectus archetypus*, the infinite understanding of God alone.

Rather than advising resignation to this predicament, Maimon demands that we *act* to overcome it. Taking his cue from Kant's theory of ideas, he suggests that we regard the idea of the infinite understanding, the *intellectus archetypus*, as a regulative ideal, as the goal of all enquiry. If we only exert the powers of our understanding, he maintains, then we can approach, even if we still cannot attain, this ideal of knowledge. In other words, we can approximate, even if we cannot reach, the status of the *intellectus archetypus*. We can make some progress toward this ideal, Maimon assures us, if we constantly strive to exert our power over nature and make it conform to the laws of our own understanding. The more we gain power over nature, the more its phenomenal content will decrease and the more its noumenal content will increase.

What Maimon is proposing here is a pragmatic solution to his own skepticism. The key to our knowledge of experience, and the resolution of skeptical doubt, now lies in the field of action rather than contemplation. Rather than just thinking about the object in a new way, we must actually make the object conform to the laws of our rational activity. Although Maimon never abandons his argument that the dualism between understanding and sensibility is fatal to the possibility of knowledge, he now suggests that, if we only act, we need not consider this dualism as something absolute and eternal. If we exert our powers over nature, then we can diminish, even if we cannot completely remove it. We will acquire at least some degree of knowledge to the extent that have gained

control over nature and made it conform to the laws of our own activity. To be sure, this does not prove the *constitutive* validity or truth about any synthetic a priori judgment about experience; but it does make such judgments into a *regulative* ideal which we can approach, though never attain, as we gradually increase our control over nature.

Here, more by implication rather than intention, Maimon was proposing some significant alternations to Kant's system. First of all, the dualism between understanding and sensibility was now more a matter of degree rather than of kind. Kant regarded the dualism as eternal and static; but Maimon made it temporary and moving, depending on the extent that we exert our powers over nature. Second, the concept of a noumenon no longer designates a transcendent entity beyond appearances, but it serves as a limiting concept to designate the goal of a complete knowledge of appearances.²⁴

Such was Maimon's own solution to the problem of skepticism, to the very challenge he himself had laid down. But it was another of Maimon's many suggestions, another of his many proposals, which neither time nor temperment allowed him to elaborate. Fichte soon developed it on a grand scale, however, making it one of the central themes of his early 1794 *Wissenschaftslehre*. It is striking that, in part III of his *Grundlage*, and in the first lecture of his *Bestimmung des Gelehrten*, Fichte considers an antinomy very similar to Maimon's.²⁵ According to this "fundamental antithesis", we are all finite beings because we are limited by and acted upon by a world outside us; we are divided into reason and sensibility, where our sensibility is purely passive, subject to the influence of nature. It is the fundamental demand of reason, the essence of the categorical imperative, however, that we attain complete autonomy and independence, or that we become only what we posit ourselves to be. We can fulfill this demand — we can achieve such complete independence — only when we attain complete control over all of nature, for only then are we no longer dependent on, or influenced by, an external world. Needless to say, then, such

²⁴ See again Maimon's *PhW*, III, 200-1.

²⁵ Cf. *Grundlage*, *SW*, I, 246-85, and *Einige Vorlesungen über die Bestimmung des Gelehrten*, *SW*, VI, 293-301.

complete independence is the prerogative of the divine understanding, which alone has the power to create all of nature.

According to Fichte, the only solution to this predicament — the only means to overcome the vast discrepancy between the demands of reason and our actual condition as finite beings — is for us *to strive* to realize the ideal of complete independence. Although we cannot ever fully attain this ideal, we can at least approach it through constant struggle and effort. We can approximate this ideal if we exert ourselves to bring nature more and more under our control, and if we try with all our power to make it conform more and more to the demands of our reason. The more nature is under our control, the more our passive sensibility will disappear, and the more our noumenal and rational nature will grow, so that we will become more like the purely noumenal *intellectus archetypus*.

It should be clear that Fichte's antithesis is very much like Maimon's antinomy, and that his concept of striving plays virtually the same role, and is based on the same idea, as Maimon's concept of the infinite progress of enquiry. The main difference between Fichte and Maimon concerns the specific moral terms in which Fichte casts his solution. Fichte insists that we should strive to realize the status of the infinite understanding because the categorical imperative commands it, and because nothing less is at stake than our autonomy or independence. There can be no doubt, however, that Fichte also sees the problem in epistemological terms too, and indeed as the main predicament facing the possibility of knowledge. For, no less than Maimon, he thinks that the ideal of knowledge is the *intellectus archetypus*, and that the dualism between thought and its object, or between understanding and sensibility, is the main obstacle to its realization.

All this makes it plain how Fichte's doctrine of the primacy of practical reason serves as his final response to the challenge of skepticism. Put very crudely, this doctrine states that knowledge is the result of action rather than contemplation. Applied to the problem of skepticism, this implies that the cure for radical doubt lies not in the field of speculation — in building firmer foundations from self-evident principles — but in the realm of action. All the objections of the skeptic are completely unanswerable, Fichte thinks, as long as we remain captive in the confines of speculation

or theory. For if we simply contemplate or reflect upon an object, we do not change it, and so the dualism between subject and object persists; but as long as that dualism remains, we have made no progress toward acquiring knowledge. The only means of overcoming the despair of skepticism, then, is through acting, for only in acting upon the world do I change it, and so diminish the subject-object dualism. The chief error of all previous epistemology, and especially that of the subjectivist tradition, in Fichte's view, is its purely contemplative or speculative paradigm of knowledge, according to which knowledge is possible apart from, and prior to, activity.²⁶ For Fichte, however, knowledge is only the result of activity, and ultimately the will itself.

Though Fichte's pragmatism marks an important break with the contemplative model of knowledge characteristic of the subjectivist tradition, it would be absurd to stress its originality. For Fichte is not only borrowing an insight of Maimon's; he is also going back to a tradition of thought as old as Francis Bacon. According to this tradition, knowledge is the product of action rather than contemplation, of making the world conform to our demands rather than trying to mirror its essence through rational theorizing. This was indeed the only possible response to Pyrrhonism, Bacon argued, given that the skeptic could always demolish the subtlest scholastic demonstration.²⁷ This allegiance to the Baconian tradition was not, however, unconscious or unacknowledged. For it was no accident that the motto of Fichte's 'Einleitungen in die Wissenschaftslehre' — and, indeed, of Kant's first *Kritik* — came from the *Novum Organum*.²⁸

²⁶ See Fichte's critique of traditional epistemology in the *Wissenschaftslehre nova methodo*, GA, IV/2, 49.

²⁷ On Bacon's response to skepticism, see Bacon, *The New Organon* (Bacon (1960), Book I, #21, 37, 50, 67, and especially 'The Great Instauration', 7-29).

²⁸ An earlier version of some parts of this paper appeared in chapter 2.2 in Beiser (2002). The first version of this paper was read at the 1999 Maimon conference in Tel-Aviv. I am especially grateful to Gideon Freudenthal for his comments on earlier drafts.

SALOMON MAIMON ALS REZENSENT,
nebst einer bisher unbeachteten Rezension¹

FLORIAN EHRENSPERGER

1.

Dieser Beitrag versucht zu zeigen, daß die 1795 anonym in den *Annalen der Philosophie*² erschienene Besprechung des Buches *Zahlenlehre der Natur*³ von Karl von Eckartshausen (1752-1803) aus der Feder Salomon Maimons stammt. Meines Erachtens ergibt sich dies aus Maimons eigener Angabe, einem Hinweis des Maimon-Biographen Sabattia Joseph Wolff (1756-1832) und darüber hinaus aus der philosophischen Position des Rezensenten.

Ich werde im folgenden derart vorgehen, daß ich zunächst Maimon und Wolff sprechen lasse. Im Anschluß daran erscheint die Rezension in ihrem Wortlaut. Eine Skizze der Standpunkte des Rezensenten und Maimons soll abschließend meine These bekräftigen.

2.

In einem bisher unveröffentlichten Brief⁴ gibt Maimon den Hinweis darauf, daß er „als Mitarbeiter im *Jacobischen Journal* eingeschrieben“⁵ sei. Daß es sich dabei um die von Ludwig Heinrich von Jakob (1759-1827) herausgegebenen *Annalen* handelt, macht Maimons weitere Angabe wahrscheinlich. Das ‚Jakobsche Journal‘

¹ Der Beitrag geht auf eine Anregung Gideon Freudenthals zurück. Für seine freundliche Unterstützung bei Fertigstellung und Korrektur bedanke ich mich herzlich.

² Siehe Jakob (1795-1797).

³ Siehe Eckartshausen (1794).

⁴ Der unvollständig erhaltene Originalbrief Maimons befindet sich im Germanischen Nationalmuseum in Nürnberg. Der Autograph trägt die Signatur „Archiv Autographen K. 40“. Datum und Adressat sind auf der erhaltenen Seite nicht vermerkt.

⁵ Germanisches Nationalmuseum Nürnberg, Archiv Autographen K. 40, recto, Zeile 8 f.

war ein Rezensionsorgan, und Maimon fährt in besagtem Brief fort, er habe „aber noch bis jetzt [...] keine *Rezension* darinn einrücken laßen”.⁶ Im Nachlaß des Herausgebers von Jakob im Besitz der Universitätsbibliothek Halle/Saale findet sich allerdings kein Beleg für eine Mitarbeit Maimons.⁷ Sabattia Joseph Wolff bestätigt jedoch in seiner *Maimoniana*⁸ die Annahme einer Rezensionstätigkeit Maimons. In einer Reihe von Anekdoten, die Maimons „schlechtes Gedächtniß”⁹ illustrieren sollen, berichtet Wolff:

Ebenso erging es ihm einst mit einem Briefe nebst einer Recension des Buches: *Zahlenlehre*. Der Professor *Jacob* forderte Maimon auf, an einem neuen Journal, welches Recensionen verschiedener Bücher enthalten sollte, Theil zu nehmen. Maimon antwortete: seine Lage erforderte es, sich nach dem Honorar zu erkundigen; er erhielt zur Antwort, daß er sich vor der Hand mit 6 Rthlr. begnügen müßte, und wurde aufgefordert, über das Buch: *Zahlenlehre* eine Recension zu schreiben. Ungeachtet Maimon keine Lust dazu hatte und es unter dem Vorwand ablehnen wollte, daß sich nicht viel erbauliches darüber sagen ließe; so wurde ihm geantwortet: er würde schon etwas erbauliches darüber sagen können. ‚Darauf muß ich es schon thun,‘ sagte Maimon ‚denn der Professor *Jacob* möchte sonst glauben, das Honorar sei mir nicht genug.‘ Als er die Recension fertig hatte, wollte er solche nebst einem Briefe an den Professor *Jacob* zur Post bringen, kam aber damit zu spät, und so trug er die Papiere nun viele Tage in seiner Tasche, und am Ende hatte er seine Recension und den Brief verloren, ohne sie wieder zu finden. ‚Ich ärgere mich nur,‘ sagte er, ‚daß ich es noch einmal machen muß.‘¹⁰

Daß Maimon die Rezension über die *Zahlenlehre* tatsächlich ein weiteres Mal angefertigt und diese von Jakob schließlich auch erreicht hat, kann man meines Erachtens in den *Annalen* selbst sehen. Dort erschien ohne Verfasserangabe unter dem Datum vom 18. und 21. September 1795 eine Rezension über das Buch *Zahlenlehre der Natur* von Karl von Eckartshausen.

⁶ Ibid., Zeile 10 f.

⁷ So die Auskunft der Universitätsbibliothek Halle/Saale vom 17.5.2000. Aus der *Lebensgeschichte* geht ferner hervor, daß Maimon mit der *Prüfung der Mendelssohnschen Morgenstunden oder aller spekulativen Beweise für das Daseyn Gottes* des „scharfsinnige[n] H[errn]. Pr[ofessor]. Jakob in Halle“ (*Leben*, I, 489) vertraut war. Siehe Jakob (1786). Diesen Hinweis verdanke ich Gideon Freudenthal.

⁸ Siehe Wolff (1813).

⁹ Ibid., 188.

¹⁰ Ibid., 194 f.

Es sprechen allerdings nicht nur diese beiden äußeren Hinweise dafür, daß es sich bei der Rezension um eine Arbeit Maimons handelt. Auch inhaltliche Gründe können für meine These geltend gemacht werden. Diese versuche ich im Anschluß an die Wiedergabe der Rezension zu skizzieren.

Zunächst folgt der diplomatische Abdruck der Rezension. Da der Rezensent nur selten wörtlich aus dem besprochenen Werk zitiert, erscheint es mir angebracht, den Wortlaut der Rezension¹¹ unkommentiert abzudrucken und in Fußnoten die genauen Belegstellen aus der *Zahlenlehre der Natur* wiederzugeben.

3.

„Annalen der Philosophie und des philosoph[ischen]. Geistes. 112. Stück. Den 18. September 1795. Metaphysik. Leipzig in Commission bey G. E. Beer: *Zahlenlehre der Natur*, oder die Natur zählt und spricht. Was sind ihre Zahlen? Was sind ihre Worte? Ein Schlüssel zu den Hyeoglyphen [sic!] der Natur. Geschrieben von dem Churpfalzbaierschen wirklichen Hofrath und geheimen Archivar v. *Eckardtshausen* [sic!]. 1794.

Nachdem Pythagoras Geist in verschiedenen körperlichen Hüllen, seine Wanderungen in dieser irdischen Welt gemacht hat; erstlich als *Ethalides* der Sohn *Mercurs*, nachher als *Euphörb*, wobey er die Ehre hatte, im trojanischen Kriege von *Menalaus* verwundet zu werden; dann als *Hermotimus*, und dann wiederum als ein armer *Fischer*, und endlich in seiner wahren Gestalt, als *Pythagoras*, scheint er nun am Ende des achtzehnten Jahrhunderts hin und wieder aufs neue zu spuken, um die armen Menschen, die sich in ihren vergeblichen Nachforschungen von dem Wege der Wahrheit verirrt haben, durch seine *Zahlenlehre* zu erleuchten, und statt der Oberfläche, sie in das Innere der Natur zu führen. Freylich kommt er nun etwas zu spät. Die *Philosophie* hat in unsern Zeiten eine solche Wendung genommen, wodurch sie alle Anfälle der *Schwärmerey* glücklich ausparieren kann. Jene hat (besonders in Deutschland,) zu sehr die Oberhand erhalten, als dass diese hoffen dürfte, je das Haupt zu erheben; es ist [890] also kein

¹¹ Die Rezension findet sich auf den Seiten 889–898. In eckigen Klammern wird die laufende Paginierung wiedergegeben.

anderes Mittel für ihre Parteygänger übrig, als die Schwärmerey als Philosophie zu verkleiden, und so unvermerkt, in die Gemüther der Menschen einschleichen zu lassen. Dieses ist vorzüglich mit dem vor uns liegenden Werke der Fall. Es ist ein so seltsames Gemisch von *Philosophie* und *Schwärmerey*, dass man anfangs nicht weiss, was man davon denken soll? Wir, als Beurtheiler, halten es also für unsere Pflicht, dieses Buch, seinem Hauptinhalte nach, zu analysieren, und seine incompatiblen Bestandtheile von einander zu trennen, woraus sich ergeben wird, dass nur so viel Gold im Tiegel anzutreffen ist, als der Arzt auf eine geschickte Art hereinpractiziert hat; das Uebrige aber ist ein unbrauchbares *caput mortuum*. Der ganzen *cabbalistischen Schwärmerey* liegt ein an sich richtiger und den Geist erhebender *Grundsatz*, der aber leider für uns ganz unbrauchbar ist, und eben so eine richtige *Idee* die aber, als solche, nicht *darstellbar* ist, zum Grunde. Der Grundsatz ist dieser: „Alle Objecte der Natur stehen mit einander, als *Dinge an sich* in Real-Verhältnissen. Dieser Satz mag immerhin seine Richtigkeit haben, da aber so wenig die *Objecte der Natur*, (als *Dinge an sich*,) als ihre *Real-Verhältnisse* zu einander uns bekannt sind, so kann uns dieser an sich richtige Satz zu nichts dienen. Die *Idee* ist die einer *allgemeinen Characteristik*, d.i. die Möglichkeit eines Zeichensystems, deren Theorie für die Theorie der mancherley Ob[891]jecte der Erkenntniss gelten, und zur Erweiterung derselben dienen soll. Die *Algebra* ist eine solche Zeichen-Theorie, die aber nur für *Grössenverhältnisse*, nicht aber für *Qualitäten-Verhältnisse* dienen kann. Diese *Idee* ist gleichfalls *nicht unmöglich*; sie ist aber nicht *darstellbar*. Die aus der Theorie der algebraischen Zeichen hergeleiteten Wahrheiten beziehn sich auf *Objecte einer möglichen Construction*, wodurch sie ihre *Realität* erhalten. Die *characteristica universalis* aber soll sich auf alle *denkbare Objecte* beziehn, wenn schon ihre *Realität* durch nichts dargethan werden kann.

Der Cabbalist bekümmert sich um diese alle nicht. Er begnügt sich nicht bey diesen erhabenen Vorstellungen stehn zu bleiben. Er will in die Geheimnisse der Natur eindringen, die Dinge an sich und ihre Real-Verhältnisse erkennen. Dieses ist auch mit unserm Verfasser der Fall. Nichts ist ihm zu hoch, nichts zu tief; das Göttliche und das Menschliche, Geister, Körper, Eigenschaften, Modificationen alles umfasst er mit seinem Culcul [sic!]. Es ist zum

Erstaunen, wie ein Mann dem es, wie aus diesem Werke selbst zu sehen ist, an philosophischem Genie nicht fehlt, sich hat so weit versteigen können? Man kann dieses Buch nicht lesen ohne zuerst in ein Paroxysmus des Lachens, nachher in Verwunderung, und endlich in niederschlagende Betrachtungen über die menschliche Schwäche zu gerathen.

Seite 11: ‚Hume unterwarf das ganze Reich der menschlichen Erkenntniss einem fürchterlichen Scepticismus durch Aufstellung seines Systems der Causalität.¹² (Man kann so wenig von Hume sagen: er habe ein eigenes System der Causalität aufgestellt, als man von einem Atheisten sagen kann, er habe ein eignes [892] System der Theologie. Hume zieht die *Realität* des Begriffs von Causalität, nämlich seine *objective Nothwendigkeit* in Zweifel, und legt demselben bloss *subjective Nothwendigkeit*, deren Entstehungsart er nach psychologischen Gründen erklärt, bey.) ‚Locke und Leibnitz arbeiten vergebens dagegen. Nun erschein[t] der tiefdenkende Kant, sammelt die Grundursachen von Hume’s Zweifeln, und wirft sich das Problem auf: Wie ist das Allgemeine und Nothwendige der menschlichen Erkenntniss möglich? Nach seinem Systeme können sich die Grundsätze des Erkenntnissvermögens, (der *synthetischen* Erkenntniss,) nicht weiter erstrecken, als auf die Erfahrung, der immer Erscheinung zum Grunde liegen muss. Dinge an sich sind bloss *denkbar*, aber nicht *erkennbar*.¹³ Kant, heisst es weiter, hat auch vollkommen Recht; allein vermöge seines eigenen Systems, lässt er zu, dass uns reale Prädicate von einem Dinge auch mittelbar bekannt werden können, durch die Anschauung eines

¹² „Hume war’s, der auf einmal im Reiche menschlicher Erkenntnisse alles einem fürchterlichen Scepticismus durch Aufstellung seines Systems der Casualität [sic!] unterwarf.“ (Eckartshausen (1794), 1)

¹³ „Leibnitz und Locke arbeiteten die Nothwendigkeit des menschlichen Erkenntnißvermögens darzustellen; allein auch diese, anstatt zur Wahrheit und Anschaulichkeit zu führen, öffneten vielmehr dem Idealismus und Scepticismus ein neues Feld, anstatt selben aus dem Weg zu räumen. Nun erscheint in unserm Jahrhunderte der tief denkende Kant, sammelte die Grundursachen von Hume’s Zweifeln, und warf sich das Problem auf: ‚Wie ist das Allgemeine und Nothwendige der menschlichen Erkenntniß möglich?‘ Nach seinem Systeme können sich die Grundsätze des Erkenntnißvermögens nicht weiter erstrecken als auf die Erfahrung. — Das Gebiet, in welchem wir allein forschen sollen, und wo wir uns allein Erweiterung unserer realen Erkenntnisse und Wissenschaften versprechen können, ist das Reich der Erfahrung, oder die Sinnenwelt: was über derselben hinaus liegt, dafür haben wir keinen Sinn, und auch kein Erkenntnißvermögen.“ (ibid., 1 f.)

andern Dinges, welches mit dem zu erkennenden Dinge gewisse reale Eigenschaften gemein hat,¹⁴ (uns können reale Prädicate von einem Dinge mittelbär [sic!] bekannt werden, will nichts mehr sagen, als dass wir ein Ding nicht bloss durch individuelle, sondern auch durch allgemein in einer *Anschauung* verstellbare [sic!] oder als Bedingungen der möglichen Erfahrung gedachte Merkmale erkennen können. Wie will nun der Verf[asser]. daraus die Möglichkeit eines mittelbaren Erkennens der *Dinge an sich* herleiten?)

,Wenn es nun eine Wissenschaft gebe, die uns mit der Anschaulich[k]eit solcher Dinge bekannt machte, die mit den zu erkennenden übersinnlichen Dingen, von welchen wir keine reale Erkenntniss oder objective Anschaulichkeit haben, [893] reale Eigenschaften gemein hätten.¹⁵ (Dieses wäre ganz vortrefflich! Aber wie soll es möglich seyn? von welcher Art sollen diese reale Eigenschaften seyn? In der *Anschauung* erkennbare! Aber alsdann werden sie keine Eigenschaften der bloss *denkbaren* Dinge seyn. Bloss *denkbare* Eigenschaften sind so wenig, wie die Objecte denen sie gehören, *erkennbar*. Wie soll man nun dadurch zu einer realen mittelbaren Erkenntniss der *Dinge an sich* gelangen?) ,so (?) wäre es dem Systeme dieses tiefen Denkers selbst nicht widersprechend, dass auch alle diese übersinnliche Gegenstände unserm Erkenntnissvermögen unterworfen wären.'¹⁶

Wir wissen nun was wir von unserm Verf[asser]. zu erwarten haben, nämlich die Aufstellung einer Wissenschaft von der Art, wie man durch die den *realen* Objecten der Anschauung und den bloss *denkbaren* Objecten gemeinschaftlichen Merkmale zur realen Erkenntniss dieser letztern gelangen kann. Lasst uns nun diese vorgebliche Wissenschaft näher betrachten!

¹⁴ „Kant hat auch vollkommen recht; allein vermög [sic!] seines eigenen Systems läßt er zu, daß uns reale Prädicate von einem Dinge auch mittelbar bekannt werden können, durch die Anschauung eines andern Dinges, welches mit dem zu erkennenden Dinge gewisse reale Eigenschaften gemein hat.“ (ibid., 3)

¹⁵ „Wenn es nun eine Wissenschaft gäbe, die uns mit der Anschaulichkeit solcher Dinge bekannt machte, die mit den zu erkennenden übersinnlichen Dingen, von welchen wir keine reelle Erkenntniß, oder objektive Anschaulichkeit haben, reelle Eigenschaften gemein hätten [...].“ (ibid.)

¹⁶ „[...] so wär' es dem System dieses tiefen Denkers selbst nicht widersprechend, daß auch alle diese übersinnliche Gegenstände unserm Erkenntnißvermögen unterworfen wären.“ (ibid.)

Seite 16. *Zahlenlehre der Natur.* „Die Zahlenlehre der Natur ist eine Wissenschaft die Gesetze aller so wohl denkbarer, als körperlich existierender Dinge durch Hülfe einer denkbaren Progression zu finden.“¹⁷ Die denkbare Progression ist die Expression des Verhältnisses die uns, arithmetisch betrachtet, die Zahlenordnung zu repräsentativen Bildern giebt, was progressiv betrachtet, einem denkbaren oder körperlich existierenden Dinge zum Grunde liegt.¹⁸ Eine Menge zählbarer Gegenstände, die in gleichem Zusammenhange in dem Verhältnisse fortgehen, machen eine arithmetische Reihe oder Progression aus[.] Eine Menge messbarer Gegenstände, die in gleichen zusammenhängenden Verhältnissen fortgehen, ma[894]chen eine geometrische Reihe oder Progression aus.¹⁹ (Schwerlich wird ein Mathematikerverständiger [sic!] mit dieser Definition zufrieden seyn! Der Unterschied zwischen einer *arithmetischen* und einer *geometrischen* Reihe beruht nicht darauf, dass die *Einheiten* in jener bloss *zählbar*, in dieser aber *messbar* oder *ausgedehnt* sind, sondern der Unterschied liegt bloss in der *verschiedenen Entstehungsart* der Glieder dieser Reihen aus einander, indem sie in der *arithmetischen* Reihe durchs *Addiren* und *Subtrahiren*; in der *geometrischen* aber durchs *Multiplirciren* und *Dividiren* geschieht. Die *Einheiten* mögen in beyden *zählbar* oder *messbar* seyn.) „und eine Menge denkbarer Gegenstände, die in gleichen zusammenhängenden Verhältnissen aus einer denkbaren Einheit fortgehen, machen eine intellectuelle Reihe oder Progression aus, und sind die constitutiven den [sic!] Theile des Progressions-Culkul [sic!] der Natur.“²⁰

¹⁷ „Die Zahlenlehre der Natur ist eine Wissenschaft die Gesetze aller sowohl denkbarer, als körperlich existirender Dinge durch Hilfe einer denkbaren Progreßion zu finden.“ (ibid., 16)

¹⁸ „Die denkbare Progreßion ist die Expreßion des Verhältnisses, die uns, arithmetisch betrachtet, die Zahlen-Ordnung zu repräsentativen Bildern desjenigen giebt, was progreßiv betrachtet einem denkbaren oder körperlich existirenden Dinge zu Grunde liegt.“ (ibid.)

¹⁹ „Eine Menge zählbarer Gegenstände, die in gleichem Zusammenhange in dem Verhältnisse fortgehen, machen eine arithmetische Reihe oder Progreßion aus.“ (ibid., 18)

²⁰ „[...] und eine Menge denkbarer Gegenstände, die in gleichen zusammenhängenden Verhältnissen aus einer denkbaren Einheit fortgehen, machen eine intellectuelle Reihe oder Progreßion aus, und sind die konstituierenden Theile des Progreßionscalculs der Natur.“ (ibid.)

S. 21. „Jedes Medium, das ein Ding an das andere anschliesst, muss solche Eigenschaften haben, die theils mit dem Dinge, das angekettet wird, theils mit dem Dinge, an das es angeschlossen wird, real gemein sind. Um also von *übersinnlichen* Dingen *sinnliche Erfahrung* zu bekommen, muss das Medium solche Eigenschaften haben, die theils an das Uebersinnliche, theils an das Sinnliche sich anschliessen können, und reale Prädicate gemein haben. Ein solches Medium aber sind die Zahlen der Natur. Ich setze ein Beyspiel: — Ich bin in einer entfernten Insel, und setze dort einen in meinem Lande unbekanntem Gegenstand. Wie kann ich diesen Gegenstand, der mir bloss denkbar ist, meinen Landsleuten begreiflich machen? Ich muss ein Medium suchen, das mit dem denkbaren Gegenstande reale Prädicate gemein hat u.s.w.²¹ (die[895]ses hat seine vollkommene Richtigkeit. Der in meinem Lande unbekanntem Gegenstand hat gewisse in einer Anschauung darstellbare Merkmale mit den darin bekannten Gegenständen gemein, wodurch ich meinen Landsleuten diesen Gegenstand beschreiben kann. Wie kann ich aber *übersinnliche* durch keine reale Prädicate *erkennbare* Gegenstände durch Merkmale beschreiben, die bloss den *sinnlichen* Gegenständen eigen sind?)

S. 23. Raisonniert der Verf[asser]. auf folgende Art: Es giebt einen Weg von der Sinnlichkeit zum Verstande; nun fragt er: könnte es nun nicht einen Weg geben vom Verstande zur Sinnlichkeit? Ganz natürlich! antwortete er, und dieses bestätigt die Erfahrung. Wenn die Denkkraft das sinnliche Bild dem Verstande überliefert hat, so hört es auf uns sinnliche Erscheinung zu seyn, so hört es auf reale Wirklichkeit zu seyn. Wir erkennen das Gedankenbild nicht mehr unmittelbar, sondern nur mittelbar,

²¹ „Jedes Medium, das ein Ding an das andere anschliesst, muß solche Eigenschaften haben, die theils mit dem Dinge, das angekettet wird, theils mit dem Dinge, an das es angeschlossen wird, reell gemein sind. Um also von übersinnlichen Dingen sinnliche Erfahrung zu bekommen, muß das Medium solche Eigenschaften haben, die theils an das Uebersinnliche, theils an das Sinnliche sich anschließen können, und reelle Prädikate gemein haben. Ein solches Medium sind aber die Zahlen der Natur, die wir vollständig erklären werden. [...] Ich setze ein Beyspiel: — Ich bin in einer entfernten Insel, und sehe dort einen in meinem Lande unbekanntem Gegenstand: wie kann ich diesen Gegenstand, der mir bloß denkbar ist, weil man in meinem Lande nie davon eine sinnliche Erfahrung gehabt hat, meinen Landsleuten begreiflich machen? Ich muß ein Medium suchen, das mit dem denkbaren Gegenstande reelle Prädikate gemein hat [...].“ (ibid., 21 f.)

durch den noch existierenden sinnlichen Gegenstand wovon das Gedankenbild Typus ist.²² (Wenn der Verstand reale, in der Anschauung erkennbare Begriffe durch Abstraction, bildet, so haben freylich diese abstracten Begriffe keine *wirkliche Existenz* ausser dem Verstande; sie haben aber nichts desto weniger ihre *Realität*. Das *Gedankenbild*, wie der Verf[asser]. sich ausdrückt, ist nicht erst vermittelt des Gegenstandes, sondern an sich *erkennbar*. Was soll aber nun daraus geschlossen werden? Dass *bloss denkbare* Gegenstände zugleich nicht *bloss denkbar*, sondern *erkennbar* seyn sollten!) Nun spricht der Verfasser von den *Mysterien der Alten*, von der *Hieroglyphik* und *Symbolik*, von der *Mythologie* u.s.w. wovon wir, wegen Enge des Raums, keinen Auszug liefern können. Aber nun kommt das [896] Wichtigste, die eigentliche *Arithmetik* oder *Zahlenlehre der Natur*. „Diese unterscheidet sich von der gemeinen Arithmetik darin, dass die gemeine Arithmetik zählt: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, und so ins Unendliche fort; die *Zahlenlehre der Natur* aber zählt: 2, 3, 4, 5, 6, 7, 8, 9, 10, und nicht weiter. Die Arithmetik lehrt 1 mal 1 ist 1; 2 mal 2 ist 4. Die *Zahlenlehre der Natur* lehrt 1 mal 1 ist 1; 1 und 1 ist 2 u.s.f. bis 10.²³ Recensent kann unmöglich diese Entgegensetzung begreifen. Er muss es daher so lange verschieben bis er in die *Geheimnisse der Zahlenlehre der Natur* werde eingeweiht werden.) 1 Quelle der Zahlen, 2 erste Zahl; erhält die

²² „Wir wollen betrachten, was denn geschieht, wenn ein sinnliches Ding zum Verstande gebracht wird? was geschieht, wenn ich erkenne? Der sinnliche Gegenstand affizirt meine Sinne, durch diese Affizirung oder Wirkung entsteht eine Art von Gegenwirkung in mir, eine Reaktion, diese Reaktion ist die Denkkraft, oder die Fähigkeit, das sinnliche Bild aufzunehmen, nicht als Sache, sondern als Bild, als Typus der Sache. Das aufgenommene Bild liefert die Denkkraft dem Verstande, welcher das Vermögen besitzt, das Mannichfaltige, oder mehrere Bilder zu einem Ganzen zu formen. So ist der Gang der Sinnlichkeit zum Verstande. Könnte es nun nicht auch einen Weg geben vom Verstande zur Sinnlichkeit? oder, Dinge, die der Mensch nur fähig ist zu denken, zur Sinnlichkeit zu bringen, und zwar nach den nämlichen Gesetzen? Ganz natürlich! Und daß es wirklich so einen Weg giebt, bestätigt [sic!] uns die Erfahrung. Wenn die Denkkraft das sinnliche Bild dem Verstande überliefert hat, so hört es auf für uns sinnliche Erscheinung zu seyn — so hört es auf reelle Wirklichkeit zu seyn. Wir erkennen das Gedankenbild nicht mehr unmittelbar, sondern nur mittelbar durch den noch existirenden sinnlichen Gegenstand, wovon das Gedankenbild Typus ist.“ (ibid., 23)

²³ „Die Arithmetik zählt: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 und so ins Unendliche fort. Die Zahlenlehre der Natur zählt: 2, 3, 4, 5, 6, 7, 8, 9, 10 und nicht weiter. [...] Die Arithmetik lehrt: 1 mal 1 ist 1; 2 mal 2 ist 4. etc. Die Zahlenlehre der Natur lehrt: 1 mal 1 ist 1; 1 und 1 ist 2 u.s.f. bis 10.“ (ebd., 64 f.)

Kraft von 1 und wird durch die Wirkung, 2. Diese 2 enthält eine fernere Kraft, wodurch 3 wird. Diese 3 wird in 4 zur Expression. Diese 4 enthält eine fernere Kraft, die sich in 5 äussert, und in 6 zu Expression wird u.s.w.²⁴ Die Naturzahl 3 ist die Zahl der Grundlinie aller Körper, das Resultat aller Wirkungen und Productionen. Die Emanation der Einheit formiert ihrer ersten Wesenheit nach, die 3te Zahl, denn jedes active Wesen bringt Action und Reaction hervor. Es liegt das Gesetz der 3ten Zahl in der Natur. Alle intellectuelle sowohl als körperliche Anfänge verhalten sich nach dieser 3ten Zahl u.s.w.²⁵

S. 83. „Die erste Kleidung Gottes, oder Gott betrachtet in der ersten göttlichen Zahl ist die Quelle aller Zahlen – 1 – Liebe. Liebe in ihrer Progression wird Wahrheit, denn Wahrheit ist geoffenbarte Liebe, Existenz der Liebe – 2. Wahrheit und Liebe vereint, machen die dritte Progression, oder Weisheit; denn Weisheit ist Wahrheit und Liebe u.s.w.’²⁶

(Der Beschluss folgt.)

[897] Annalen der Philosophie und des philosoph[ischen]. Geistes. 113. Stück. Den 21. September 1795. Metaphysik. Leipzig in Commission bey G. E. Beer: *Zahlenlehre der Natur* u.s.w. (Beschluss des im 111ten [sic!] Stücke abgebrochenen Artikels.)

Nun folgen (Seite 115) die von dem Leser so lang erwartete Regeln des Calkuls, „wenn man rechnen will, so bemerke man folgende Regeln: 1) man suche die Einheit seines Gegenstandes; 2) bringe diese Einheit in Action; 3) suche die Gegen-Action; 4) suche durch Action und Gegen-Action die Wirkung; 5) bringe diese Wirkung mit der Einheit in Verhältniss; 6) suche die weitere

²⁴ „1 Quelle der Zahlen. 2 erste Zahl, erhält die Kraft von 1, und wird durch die Wirkung 2. Dieses 2 enthält eine fernere Kraft, wodurch 3 wird; Dieses 3 wird in 4 zur Expreßion: Dieses 4 enthält eine fernere Kraft, die sich in 5 äußert, und in 6 zur Expreßion wird.“ (ibid., 70)

²⁵ „Die Naturzahl 3 ist die Zahl der Grundlinie aller Körper; das Resultat aller Wirkungen und Produktionen. [...] Die Emanation der Einheit formiert ihrer ersten Wesenheit nach die 3-Zahl, denn jedes active Wesen bringt Aktion und Reaktion hervor. Folgerung. Es liegt das Gesetz der 3-Zahl in der Natur. Alle intellectuelle sowohl als körperliche Anfänge verhalten sich nach dieser 3-Zahl.“ (ibid., 77)

²⁶ „Die erste Kleidung Gottes, oder Gott betrachtet in der ersten göttlichen Zahl ist die Quelle aller Zahlen – 1 – Liebe; [...] Liebe in ihrer Progreßion wird Wahrheit, denn Wahrheit ist geoffenbarte Liebe, Existenz der Liebe – 2. Wahrheit und Liebe vereint machen die dritte Progreßion, oder Weisheit, denn Weisheit ist Wahrheit und Liebe – 3.“ (ibid., 83)

Dreykraft gegen die ersten; oder betrachte die erste Dreykraft als Action, und suche die Dreykraft der Reaction, oder die erste Aufnahme der der [sic!] ersten Dreykraft u.s.w.²⁷ Wir denken der Leser kann an diesen Beyspielen genug haben, um Lust zu bekommen, die grossen Geheimnisse der Zahlenlehre der Natur aus der Quelle selbst zu schöpfen.

Wenn der Verfasser die Natur der philosophischen Erkenntniss aus Begriffen genauer untersucht, und seine Gabe zum Combinieren, Eintheilen und Ordnen besser angewandt, und auf eine *characteristica universalis*, nicht im Sinne des *Leibnitz*, als Mittel zur Erweiterung, sondern in dem Sinne des *Bischoff Willkens*, zur Deutlichmachung und systematischen Ordnung unsrer gesammten Erkenntniss gedacht hätte, so konnten wir von ihm, statt dieses, ein sehr brauchbares Werk erhalten, womit der litterarischen Welt mehr gedient wäre, als mit einem sol[898]chen *salto mortale* von der Sinnenwelt ins Uebersinnliche durch eine Zahlenlehre der Natur.”

4.

Die philosophische Position, die den Maßstab der Kritik an der *Zahlenlehre* darstellt, läßt sich in groben Zügen folgendermaßen charakterisieren: Den Ausgangspunkt bildet die fundamentale Unterscheidung Immanuel Kants von *Erscheinungen* und *Dingen an sich*. Diese Trennung in erkennbare und bloß denkbare Objekte hat weiterhin die Bestimmung von (kritischer) Philosophie auf der einen Seite und Dogmatismus und Schwärmerei auf der anderen Seite zur Folge. Dem unkritischen Projekt einer *Erkenntnis* der Dinge an sich stellt der Rezensent die *Idee* einer universellen Charakteristik entgegen. Die *characteristica universalis* wird durch eine Gegenüberstellung von Gottfried Wilhelm Leibniz mit John Wilkins [Bischof von Chester] (1614-1672) eingehender differenziert. Während jener eine Erweiterung der Erkenntnis anstrebe,

²⁷ „Wenn man also rechnen will, so bemerke man folgende Regeln: 1. Man suche die Einheit seines Gegenstandes. 2. Bringe diese Einheit in Aktion. 3. Suche die Gegenaktion. 4. Suche durch Aktion und Gegenaktion die Wirkung. 5. Bringe diese Wirkung mit der Einheit in Verhältniß. 6. Suche die weitere Dreykraft gegen der ersten; oder betrachte die erste Dreykraft als Aktion, und suche die Dreykraft der Reaktion, oder die erste Aufnahme der ersten Dreykraft.“ (ibid., 115 f.)

liege dem Projekt von Wilkins die Idee einer systematischen Ordnung bereits gefundener Erkenntnisse zu Grunde.

Eine derartige Auffassung, wie sie in der Rezension zu Tage tritt, läßt sich meines Erachtens mühelos in die Philosophie Maimons integrieren. In dem posthum erschienenen Aufsatz „Salomon Maimon's Geschichte seiner philosophischen Autorschaft, in Dialogen“²⁸ zeichnet Maimon den Weg seiner intellektuellen Entwicklung nach. Neben dem Einfluß von Moses ben Maimon (Maimonides) und Christian Wolff weist er auf die entscheidende Bedeutung der *kritischen* Philosophie Kants hin: „Endlich von *Kant* hat er [Maimon über sich selbst; F.E.] gelernt den Unterschied zwischen bloß formeller und reeller Erkenntniß, und daß jene nicht hinreichend ist, diese zu bestimmen.“²⁹ In dieser Scheidung erblickt er wiederum „den negativen Vortheil, die durch bloße Erklärungen [d.h. Definitionen; F.E.] bestimmte vermeintliche reelle Erkenntniß auf Bedingungen einer möglichen Construction einzuschränken.“³⁰ Wie Kant versteht Maimon dabei Konstruktion als „Darstellung in einer möglichen Anschauung“.³¹ Und in derselben Weise hält der Rezensent daran fest, daß Gegenstände der Erkenntnis „*Objecte einer möglichen Construction*“³² sein müssen. Realität, so der Rezensent weiter, erhält eine Erkenntnis allein durch ihre *Darstellbarkeit*, d.h. durch ihre Konstruktion in der Anschauung. Die kritische Philosophie zieht eine Grenze zwischen denkbaren (formellen) und erkennbaren (reellen, in der Anschauung konstruierbaren) Objekten.

Eine dogmatische Metaphysik wird im Gegensatz dazu durch Überschreiten dieser Grenze charakterisiert. Der Dogmatismus, so Maimon, versucht „an sich bloß *gedachte*, aber von uns *unerkannte Dinge an sich*“³³ „d.h. bloß auf eine ganz unbestimmte Art als an sich außer dem Erkenntnißvermögen bestimmt gedachte (logische) *Dinge* dennoch durch *a priori* gedachte *Verhältnisse* bestimmen zu können.“³⁴ Diese Erkenntnis der Dinge an sich soll entweder unmittelbar, oder mittelbar (*per analogiam*) erreicht werden.

²⁸ VII, 627-648.

²⁹ *Ibid.*, 640.

³⁰ *Ibid.*

³¹ *Ibid.*, 642.

³² Jakob (1795-1797), 1795, 112. Stück, 891.

³³ *Logik*, V, 433.

³⁴ *Ibid.*, 432.

Der Rezensent charakterisiert gleichermaßen die Schwärmerei dadurch, daß sie vorgibt, „durch die den realen Objecten der Anschauung und den bloss denkbaren Objecten gemeinschaftlichen Merkmalen zur realen Erkenntnis dieser letztern gelangen“³⁵ zu können. Dieses angestrebte mittelbare Erkennen wäre das kritisierte *salto mortale*: eine Erkenntnis der Dinge an sich (das Übersinnliche) mittels der Erkenntnis der Erscheinungen (Sinnenwelt). Maimon und der Rezensent orten gleichermaßen einen solchen unkritischen Gebrauch des Erkenntnisvermögens u.a. in der Kabbala.³⁶ Der „*cabbalistischen Schwärmerei*“³⁷ der *Zahlenlehre*, so die Analyse des Rezensenten, liegt die *Idee* einer universellen Charakteristik zu Grunde. Das Eigentümliche der universellen Charakteristik sieht Maimon darin, „aus dem Bekannten das Unbekannte zu finden“.³⁸ Eine universelle Charakteristik soll nach Leibniz, im Verständnis Maimons, „allgemein und nicht bloß zum Gebrauch der Erfindung der Verhältnisse der Quantitäten, sondern auch der Qualitäten eingerichtet werden“.³⁹ Aber Leibniz habe die Möglichkeit dieser Idee nicht dargelegt: „Er hat aber diese Idee nicht weiter verfolgt. Ja er hat nicht einmal die Möglichkeit davon gezeigt, sondern sie blieb wie sie war eine bloße Idee.“⁴⁰

Der Schwärmerei einer *Zahlenlehre der Natur* liegt eben dieser Gedanke zu Grunde. Es ist dies, so der Rezensent, „die Möglichkeit eines Zeichensystems, deren Theorie für die Theorie der mancherley Objecte der Erkenntnis gelten, und zur Erweiterung derselben dienen soll.“⁴¹ Und wie die Leibnizische Charakteristik geht sie darauf aus, materiale (reelle) Bestimmungen der Erkenntnis zu erlangen, ohne zu reflektieren, daß eine *Zahlenlehre* als

³⁵ Jakob (1795-1797), 1795, 112. Stück, 893.

³⁶ Zur Kabbala bemerkt Maimon: „Aus der Kabbale, wie wir sie jetzt haben, kann man so wenig etwas vernünftig Theoretisches, als etwas nützlich Praktisches lernen. Sie besteht in einem bloßen Spiele mit Zahlen und Buchstaben, worin die Kabbalisten große Geheimnisse suchen, und wodurch (gleich Gott, der sich, ihrem Vorgeben nach, bei Erschaffung der Welt eben dieses Mittel bedient haben soll) sie alles nach Belieben hervorzubringen im Stande sind.“ (III, 460 f. Siehe auch *Leben*, I, 126 f.)

³⁷ Jakob (1795-1797), 1795, 112. Stück, 890.

³⁸ *Tr*, II, 325.

³⁹ *Ibid*.

⁴⁰ *Ibid*.

⁴¹ Jakob (1795-1797), 1795, 112. Stück, 891.

formelle Wissenschaft „nur für *Größenverhältnisse*, nicht aber für *Qualitäten-Verhältnisse* dienen kann.“⁴²

Der Leibnizischen Konzeption einer *characteristica universalis* wird in der Rezension das Projekt des Bischof Wilkins gegenübergestellt. Dieses wird dadurch charakterisiert, daß es zur „Deutlichmachung und systematischen Ordnung unsrer gesammten Erkenntniß“⁴³ taug und vornehmlich im „Combinieren, Eintheilen und Ordnen“⁴⁴ bestehe. Gleichlautende Ausführungen finden sich im *Versuch über die Transzendentalphilosophie*, wo Maimon dem Leibnizischen Projekt der *Erfindung* neuer Wahrheiten das Unternehmen des Bischof zur *Ordnung* bereits gefundener Wahrheiten gegenüberstellt. Der Vorteil der letzteren Methode liegt nach Maimon darin, „den Gebrauch desjenigen was man auch sonst hat, oder zum wenigsten haben kann, zu erleichtern, und allgemein zu machen.“⁴⁵ Und um „Verwirrungen und Wortstreitigkeiten“⁴⁶ zu vermeiden, wäre der Plan des Bischof hierbei „von großem Nutzen.“⁴⁷

5.

Diese nur angedeuteten Parallelen zwischen Ansichten Maimons und dem Standpunkt des Rezensenten mögen hinreichen, um der brieflichen Auskunft Maimons und dem Beleg in Wolffs *Maimoniana* über die Autorschaft Maimons eine hohe Plausibilität zuzuschreiben.

⁴² Ibid.

⁴³ Ibid., 897.

⁴⁴ Ibid.

⁴⁵ *Tr*, II, 325.

⁴⁶ Ibid., 326.

⁴⁷ Ibid.

THE PUBLISHED WORKS OF MAIMON

GW indicates references to: Salomon Maimon: *Gesammelte Werke*, ed. Valerio Verra. Hildesheim *et. al.*: 1965-1976 (2000).

Monographs:

- Versuch über die Transscendentalphilosophie mit einem Anhang über die symbolische Erkenntniß und Anmerkungen von Salomon Maimon, aus Litthauen in Polen. Berlin, bei Christian Friedrich Voß und Sohn. 1790. [GW II, VII-442]
- Philosophisches Wörterbuch, oder Beleuchtung der wichtigsten Gegenstände der Philosophie, in alphabetischer Ordnung, von Salomon Maimon. Erstes Stück. Berlin. Bei Johann Friedrich Unger. 1791. [GW III, 1-246]
- More Nebuchim. Sive Liber Doctor Perplexorum Auctore R. Mose Majemonide Arabico Idiomatice Conscriptus, R. Samuele Abben Thibbone In Linguam Hebraeam Translatus, Novis Commentaris Uno R. Mosis Narbonnensis, Ex Antiquissimis Manuscriptis Deprompto; Altero Anonymi Cujusdam, Sub Nomine Gibeath Hamore Adauctus, Nunc In Lucem Editus Cura Et Impensis Isaaci Eucheli. Berolini, Officina Scholae Liberae Judaicae MDCCXCI. [1791; in Hebrew]
- Ankündigung und Aufforderung zu einer allgemeinen Revision der Wissenschaften. Einer Königl. Akademie der Wissenschaften zu Berlin vorgelegt von Salomon Maimon. Berlin, 1792. Gedruckt bei Johann Georg Langhoff.
- Salomon Maimon's Lebensgeschichte. Von ihm selbst geschrieben und herausgegeben von K. P. Moritz. In zwei Theilen. Berlin, 1792, 1793. bei Friedrich Vieweg dem ältern. [GW I, IX-292]
- Salomon Maimon's Lebensgeschichte. Von ihm selbst geschrieben und herausgegeben von K. P. Moritz. Zweiter und letzter Theil. Berlin, 1793. bei Friedrich Vieweg dem ältern. [GW I, 293-588]

- Ueber die Progressen der Philosophie veranlaßt durch die Preisfrage der königl. Akademie zu Berlin für das Jahr 1792: Was hat die Metaphisik seit Leibniz und Wolf für Progressen gemacht? von Salomon Maimon. Berlin 1793. bei Wilhelm Vieweg dem jüngern. [reprinted in: Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil. Berlin, 1793. bei Wilhelm Vieweg. (GW IV, 23-80)]
- Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil. Berlin, 1793. bei Wilhelm Vieweg. [GW IV, 1-294]
- Bacons von Verulam Neues Organon. Aus dem Lateinischen übersetzt von George Wilhelm Bartoldy. Mit Anmerkungen von Salomon Maimon. Zwei Bände. Mit Kupfern. Berlin, bei Gottfried Carl Nauck. 1793. [GW IV, 295-530]
- Anfangsgründe der Newtonischen Philosophie von Dr. Pemberton. Aus dem Englischen mit Anmerkungen und einer Vorrede von Salomon Maimon. Erster Theil mit vier Kupfer tafeln. Berlin, bei Friedrich Maurer 1793. [GW IV, 531-580]
- Versuch einer neuen Logik oder Theorie des Denkens. Nebst angehängten Briefen des Philaletes an Aenesidemus. Von Salomon Maimon. Berlin, 1794. Bei Ernst Felisch. [GW V]
- Die Kathegorien des Aristoteles. Mit Anmerkungen erläutert und als Propädeutik zu einer neuen Theorie des Denkens dargestellt von Salomon Maimon. Berlin, 1794. Bei Ernst Felisch. [GW VI, 1-271]
- Kritische Untersuchungen über den menschlichen Geist oder das höhere Erkenntniß- und Willensvermögen von Salomon Maimon. Leipzig, bei Gerhard Fleischer dem Jüngern. 1797. [GW VII, 1-373]

Articles:

- Beur philosophi al Divrei ha-Rambam zal be-Ferush ha-Mishnayot shelo, Avot 3:17: Rabbi Eliezer ben Azaria omer: im ein Daat – ein Binah, im ein Binah – ein Daat. [A Philosophical Exposition of Maimonides' Commentary to Aboth 3:17: "Rabbi Eliezer ben Azariah says: ... without da'at there is no binah; without binah there is no da'at ..."] In: ha-Measaf. 1789, Bd. II, 266-269. [in Hebrew]

- Probe Rabbinischer Philosophie. In: Berlinische Monatsschrift. 1789, Bd. XIV, 171-179. [GW I, 589-597]
- Ueber Wahrheit. Ein Brief des Hrn. S Maimon, an seinen edlen Freund L. in Berlin. In: Berlinisches Journal für Aufklärung. 1789, Bd. V/1, 67-84. [GW I, 599-616]
- Was sind Tropen? In: Berlinisches Journal für Aufklärung. 1789, Bd. V/2, 162-179.
- Ueber Wahrheit. Schreiben des Herrn Maimon an Herrn Tieftrunk. In: Berlinisches Journal für Aufklärung. 1790, Bd. VII/1, 22-51. [GW II, 469-498]
- Baco und Kant. Schreiben des H. S. Maimon an den Herausgeber dieses Journals. In: Berlinisches Journal für Aufklärung. 1790, Bd. VII/2, 99-122. [GW II, 499-522]
- Ueber die Weltseele. (Entelechia universi.) In: Berlinisches Journal für Aufklärung. 1790, Bd. VIII/1, 47-92.
- Ueber Wahrheit, an den Herrn S. Maimon. Von J. H. Tieftrunk. In: Berlinisches Journal für Aufklärung. 1790, Bd. VIII/2, 115-158. [GW II, 523-566] [author: J. H. Tieftrunk; notes: A. Riem and S. Maimon]
- Ankündigung. In: Berlinisches Journal für Aufklärung. 1790, Bd. VIII/2, 186-192.
- Antwort des Hrn. Maimon auf voriges Schreiben. In: Berlinisches Journal für Aufklärung. 1790, Bd. IX/1, 52-80.
- Ueber den Plan des Magazins zur Erfahrungsseelenkunde. Auszug aus einem Briefe an den Herausgeber, von Herrn Salomon Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1791, Bd. VIII/3, 1-7. [GW III, 247-253]
- Ueber Täuschung. In: Deutsche Monatsschrift. 1791, Bd. I, 274-287.
- Wirkung des Denkvermögens auf die Sprachwerkzeuge. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1791, Bd. VIII/3, 8-16. [GW III, 254-262]
- Ueber Selbsttäuschung. In Bezug auf den vorhergehenden Aufsatz. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1791, Bd. VIII/3, 38-50. [GW III, 263-275]

- Ueber das Vorhersehungsvermögen. In: Deutsche Monatschrift. 1791, Bd. II, 45-67. [GW III, 276-298]
- Ueber Stetigkeit in der Natur. In: Deutsche Monatschrift. 1791, Bd. II, 136-145. [GW III, 299-308]
- Ueber die Theodicee. In: Deutsche Monatschrift. 1791, Bd. III, 190-212. [GW III, 309-331]
- Schreiben des Herrn Salomon Maimon an den Herausgeber, (den vorstehenden Artikel betreffend.) In: Annalen der Akademie der Künste und mechanischen Wissenschaften zu Berlin. 1791, 78-85. [GW III, 332-339]
- Ankündigung und Aufforderung zu einer allgemeinen Revision der Wissenschaften. Einer Königlichen Akademie der Wissenschaften zu Berlin vorgelegt. In: Deutsche Monatschrift. 1792, Bd. III, 42-52. [GW III, 340-350]
- Ueber den Plan des Magazins zur Erfahrungsseelenkunde. Auszug aus einem Briefe von S. M. an K. P. M. Fortsetzung. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 1-23. [GW III, 351-373]
- Fragmente aus Ben Josua's Lebensgeschichte. Herausgegeben von K. P. Moritz. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 24-69.
- Ueber den Traum und über das Divinationsvermögen. (Als eine Fortsetzung des vierten Aufsatzes 3ten Stückes 8ten Bands.) In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 70-88. [GW III, 374-392]
- Von S. M. an K. P. M. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 90-96. [GW III, 393-399]
- Schreiben an Herrn K. P. Moritz, mit Anmerkungen von Herrn S. Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 109-126. [GW III, 400-417] [author: J. H. Mathy; notes: S. Maimon]
- Fortsetzung des Aufsatzes über Täuschung und besonders vom Traume. (S. 8ten Bandes 3tes St. S. 17.) In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für

- Gelehrte und Ungelehrte. 1792, Bd. IX/2, 10-25. [author: J. Veit; notes: S. Maimon]
- Fortsetzung des Fragments aus Ben Josua's Lebensgeschichte. Herausgegeben von K. P. Moritz. (Siehe 9ten B. 1tes St. S. 24.) In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/2, 41-88.
 - Obereits Widerruf für Kant. Ein psychologischer Kreislauf. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/2, 106-143. [GW III, 418-455] [author: J. H. Obereit; notes: S. Maimon]
 - Einleitung zur neuen Revision des Magazins zur Erfahrungsseelenkunde. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/3, 1-28. [GW III, 462-490]
 - Antwort auf das Schreiben des Herrn Obereit an Herrn S. Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/3, 100-105. [GW III, 456-461]
 - Ueber den Geschmack. In: Deutsche Monatsschrift. 1792, Bd. I, 204-226.
 - Ueber den Geschmack. Fortsetzung. In: Deutsche Monatsschrift. 1792, Bd. I, 296-315.
 - Revision der Erfahrungsseelenkunde. Von Salamon [sic!] Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/1, 1-10. [GW IV, 583-592]
 - Sprache in psychologischer Rücksicht. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/1, 11-16. [GW IV, 593-598]
 - Ueber die Anmerkungen des Herrn Maimon zu der Fortsetzung des Aufsatzes über Täuschung und besonders vom Traume im 9ten Bande 2ten Stück S. 2. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/1, 98-127. [author: J. Veit; notes: S. Maimon]

- Fortsetzung der Revision der Erfahrungsseelenkunde. Von Salomon Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/2, 1-7. [GW IV, 599-605]
- Ueber die Schwärmerei. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, X/2, 43-48. [GW IV, 611-616]
- Auszug aus Jordan Bruno von Nola. Von der Ursache, dem Prinzip und dem Einen. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/2, 49-84. [GW IV, 617-652]
- Einleitung zur Realübersicht des Magazins zur Erfahrungsseelenkunde. von Salomon Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/3, 1-3. [GW IV, 607-609]
- [Realübersicht des Magazins zur Erfahrungsseelenkunde.] In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/3, 3-146.
- Versuch einer neuen Darstellung des Moralprinzips und Deduktion seiner Realität. In: Berlinische Monatsschrift. 1794, Bd. XXIV, 402-453. [GW VI, 274-325]
- Ueber die ersten Gründe des Naturrechts. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1795, Bd. I/2, 141-174. [GW VI, 327-360]
- Ueber die ersten Gründe des Naturrechts. In: Berlinische Monatsschrift. 1795, Bd. XXV, 310-341.
- Ueber den Gebrauch der Philosophie zur Erweiterung der Erkenntniß. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1795, Bd. II/1, 1-35. [GW VI, 362-396]
- Das Genie und der methodische Erfinder. In: Berlinische Monatsschrift. 1795, Bd. XXVI, 362-384. [GW VI, 398-420]
- Pragmatische Geschichte des Begriffs von Philosophie, und Beurtheilung der neuern Methode zu philosophiren. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1797, Bd. VI/2, 150-181. [GW VII, 374-405]
- Die philosophische SprachVerwirrung. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1797, Bd. VII/3, 213-258. [GW VII, 406-451]

- Ueber die ersten Gründe der Moral. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1798, Bd. VIII/3, 165-190. [GW VII, 452-477]
- Der große Mann. In: Neue Berlinische Monatsschrift, 1799. Bd. II, 244-283. [GW VII, 481-520]
- Erklärung einer allgemeinbekannten merkwürdigen anthropologischen Erscheinung. In: Neue Berlinische Monatsschrift. 1800, Bd. III, 61-72. [GW VII, 521-532]
- Der moralische Skeptiker. In: Berlinisches Archiv der Zeit und ihres Geschmacks. 1800, Bd. II, 271-292. [GW VII, 533-554]

Posthumous Works:

- Sophistik des menschlichen Herzens. In: Neue Berlinische Monatsschrift. 1801, Bd. V, 44-76. [GW VII, 575-607]
- Ideen und Plane zu neuen Untersuchungen. Aus Salomon Maimon's hinterlassenen Papieren. In: Neues Museum der Philosophie und Litteratur. 1803, Bd. I/1, 145-160. [GW VII, 610-623]
- Salomon Maimon's Geschichte seiner philosophischen Autorschaft, in Dialogen. Aus seinen hinterlassenen Papieren. In: Neues Museum der Philosophie und Litteratur. 1804, Bd. II/1, 125-146. [GW VII, 627-648]
- Ideen und Plane. Aus Salomon Maimon's hinterlassenen Papieren. Fortsetzung und Beschluß. In: Neues Museum der Philosophie und Litteratur. 1804, Bd. II/2, 139-156. [GW VII, 649-666]
- Salomon Maimon's kritisches Gutachten über die Kantische Philosophie. Als Beschluß des Aufsatzes No. VI. im vorigen Hefte. In: Neues Museum der Philosophie und Litteratur. 1804, Bd. II/2, 159-162. [GW VII, 667-670]
- [Über das Projekt einer Gesellschaft zur Beförderung der Menschenkenntnis.] In: Maimoniana. Oder Rhapsodien zur Charakteristik Salomon Maimon's. Aus seinem Privatleben gesammelt von Sabattia Joseph Wolff. Berlin 1813, 143-149. [GW VII, 673-679]

- Fortsetzung der Revision der Erfahrungsseelenkunde. Von Salomon Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/2, 1-7. [GW IV, 599-605]
- Ueber die Schwärmerei. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, X/2, 43-48. [GW IV, 611-616]
- Auszug aus Jordan Bruno von Nola. Von der Ursache, dem Prinzip und dem Einen. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/2, 49-84. [GW IV, 617-652]
- Einleitung zur Realübersicht des Magazins zur Erfahrungsseelenkunde. von Salomon Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/3, 1-3. [GW IV, 607-609]
- [Realübersicht des Magazins zur Erfahrungsseelenkunde.] In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/3, 3-146.
- Versuch einer neuen Darstellung des Moralprinzips und Deduktion seiner Realität. In: Berlinische Monatsschrift. 1794, Bd. XXIV, 402-453. [GW VI, 274-325]
- Ueber die ersten Gründe des Naturrechts. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1795, Bd. I/2, 141-174. [GW VI, 327-360]
- Ueber die ersten Gründe des Naturrechts. In: Berlinische Monatsschrift. 1795, Bd. XXV, 310-341.
- Ueber den Gebrauch der Philosophie zur Erweiterung der Erkenntniß. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1795, Bd. II/1, 1-35. [GW VI, 362-396]
- Das Genie und der methodische Erfinder. In: Berlinische Monatsschrift. 1795, Bd. XXVI, 362-384. [GW VI, 398-420]
- Pragmatische Geschichte des Begriffs von Philosophie, und Beurtheilung der neuern Methode zu philosophiren. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1797, Bd. VI/2, 150-181. [GW VII, 374-405]
- Die philosophische SprachVerwirrung. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1797, Bd. VII/3, 213-258. [GW VII, 406-451]

- Ueber die ersten Gründe der Moral. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1798, Bd. VIII/3, 165-190. [GW VII, 452-477]
- Der große Mann. In: Neue Berlinische Monatsschrift, 1799. Bd. II, 244-283. [GW VII, 481-520]
- Erklärung einer allgemeinbekannten merkwürdigen anthropologischen Erscheinung. In: Neue Berlinische Monatsschrift. 1800, Bd. III, 61-72. [GW VII, 521-532]
- Der moralische Skeptiker. In: Berlinisches Archiv der Zeit und ihres Geschmacks. 1800, Bd. II, 271-292. [GW VII, 533-554]

Posthumous Works:

- Sophistik des menschlichen Herzens. In: Neue Berlinische Monatsschrift. 1801, Bd. V, 44-76. [GW VII, 575-607]
- Ideen und Plane zu neuen Untersuchungen. Aus Salomon Maimon's hinterlassenen Papieren. In: Neues Museum der Philosophie und Litteratur. 1803, Bd. I/1, 145-160. [GW VII, 610-623]
- Salomon Maimon's Geschichte seiner philosophischen Autorschaft, in Dialogen. Aus seinen hinterlassenen Papieren. In: Neues Museum der Philosophie und Litteratur. 1804, Bd. II/1, 125-146. [GW VII, 627-648]
- Ideen und Plane. Aus Salomon Maimon's hinterlassenen Papieren. Fortsetzung und Beschluß. In: Neues Museum der Philosophie und Litteratur. 1804, Bd. II/2, 139-156. [GW VII, 649-666]
- Salomon Maimon's kritisches Gutachten über die Kantische Philosophie. Als Beschluß des Aufsatzes No. VI. im vorigen Hefte. In: Neues Museum der Philosophie und Litteratur. 1804, Bd. II/2, 159-162. [GW VII, 667-670]
- [Über das Projekt einer Gesellschaft zur Beförderung der Menschenkenntnis.] In: Maimoniana. Oder Rhapsodien zur Charakteristik Salomon Maimon's. Aus seinem Privatleben gesammelt von Sabattia Joseph Wolff. Berlin 1813, 143-149. [GW VII, 673-679]

Letters:

to Frau von B.:

- no date. In: *Maimoniana. Oder Rhapsodien zur Charakteristik Salomon Maimon's. Aus seinem Privatleben gesammelt von Sabattia Joseph Wolff.* Berlin 1813, 209 f.

to Lazarus Bendavid:

- 7 February 1800. In: *Zwei Briefe Salomon Maimons an Lazarus Bendavid über Kants Anthropologie und die Fichtesche Philosophie.* In: Jacob Guttmann: *Lazarus Bendavid. Seine Stellung zum Judentum und seine literarische Wirksamkeit.* (Schluß). In: *Monatsschrift für Geschichte und Wissenschaft des Judentums.* 1917, Bd. 61 (Neue Folge 25), 207-210.
- 24 May 1800. In: *Zwei Briefe Salomon Maimons an Lazarus Bendavid über Kants Anthropologie und die Fichtesche Philosophie.* In: Jacob Guttmann: *Lazarus Bendavid. Seine Stellung zum Judentum und seine literarische Wirksamkeit.* (Schluß). In: *Monatsschrift für Geschichte und Wissenschaft des Judentums.* 1917, Bd. 61 (Neue Folge 25), 210-211.

to Johann Samuel Fest:

- no date. In: *Maimoniana. Oder Rhapsodien zur Charakteristik Salomon Maimon's. Aus seinem Privatleben gesammelt von Sabattia Joseph Wolff.* Berlin 1813, 199-200.

to Johann Gottlieb Fichte:

- 16 August 1794. In: J.G. Fichte. *Briefwechsel. Kritische Gesamtausgabe.* Gesammelt und herausgegeben von Hans Schulz. Zweite, um einen Nachtrag vermehrte Auflage. Leipzig 1930, Bd. 1, 401-402. [GW VI, 449-450]
- 16 October 1794. In: J.G. Fichte. *Briefwechsel. Kritische Gesamtausgabe.* Gesammelt und herausgegeben von Hans Schulz. Zweite, um einen Nachtrag vermehrte Auflage. Leipzig 1930, Bd. 1, 406-407. [GW VI, 451-452]

to Johann Wolfgang Goethe:

- 2 September 1794. In: Günter Schulz: *Salomon Maimon und Goethe.* In: *Goethe. Neue Folge des Jahrbuchs der Goethe-Gesellschaft.* 1954, Bd. 16, 282-284.

- 28 September 1794. In: Günter Schulz: Salomon Maimon und Goethe. In: Goethe. Neue Folge des Jahrbuchs der Goethe-Gesellschaft. 1954, Bd. 16, 287.

to Immanuel Kant:

- 7 April 1789. In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin 1900, 15-17. [GW VI, 423-425]
- July 1789. In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin 1900, 66-67. [GW VI, 426-427]
- 9 May 1790. In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin 1900, 167. [GW VI, 428]
- 15 May 1790. In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin 1900, 169. [GW VI, 429-431]
- 14 May 1791 [Karl Philipp Moritz and Maimon]. In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin 1900, 246. [GW VI, 432]
- 20 September 1791. In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin 1900, 272-274. [GW VI, 433-435]
- 30 November 1792. In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin 1900, 374-379. [GW VI, 436-441]
- 2 December 1793. In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Bd. XI. Berlin 1900, 452-453. [GW VI, 442-443]

to Peina:

- 3 November 1799. In: Kronos. ein Archiv der Zeit. 1801, Bd. 1, 30-33. [GW VII, 557-560]
- 5 November 1799. In: Kronos. ein Archiv der Zeit. 1801, Bd. 1, 33-35. [GW VII, 560-562]
- 17 May 1800. In: Kronos. ein Archiv der Zeit. 1801, Bd. 1, 35-37. [GW VII, 562-564]
- 20 October 1800. In: Kronos. ein Archiv der Zeit. 1801, Bd. 1, 38-40. [GW VII, 565-567]

- 7 November 1800. In: *Kronos. ein Archiv der Zeit.* 1801, Bd. 1, 40-44. [GW VII, 567-571]
- 10 November 1800. In: *Kronos. ein Archiv der Zeit.* 1801, Bd. 1, 44-46. [GW VII, 571-573]

to Karl Leonhard Reinhold:

- no date. In: *Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil.* Berlin, 1793. bei Wilhelm Vieweg, 191-196. [GW IV, 213-218]
- no date. In: *Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil.* Berlin, 1793. bei Wilhelm Vieweg, 202-208. [GW IV, 224-230]
- no date. In: *Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil.* Berlin, 1793. bei Wilhelm Vieweg, 216-220. [GW IV, 238-242]
- 22 May 1792. In: *Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil.* Berlin, 1793. bei Wilhelm Vieweg, 221-223. [GW IV, 243-245]
- 24 May 1792. In: *Karl Leonhard Reinhold's Leben und litterarisches Wirken, nebst einer Auswahl von Briefen Kant's, Fichte's, Jacobi's und anderer philosophirender Zeitgenossen an ihn, herausgegeben von Ernst Reinhold.* Jena 1825, 374-376. [GW VI, 446-448]
- no date. In: *Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil.* Berlin, 1793. bei Wilhelm Vieweg, 225-234. [GW IV, 247-256]
- no date. In: *Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil.* Berlin, 1793. bei Wilhelm Vieweg, 238-244. [GW IV, 260-266]

Varia:

- Anzeig. In: *Königl. privilegirte Berlinische Zeitung. von Staats- und gelehrten Sachen.* 25stes Stück. Dienstags, den 28sten Februar 1792. [without pagination]
- Plan. [sketch of a project entitled „Ueber das wissenschaftliche Genie, oder das Erfindungsvermögen, als Beitrag zu einer Theorie der Erfindung.“] In: Günter Schulz: *Salomon Maimon und Goethe.* In: *Goethe. Neue Folge des Jahrbuchs der Goethe-Gesellschaft* 16, 1954, 284-287.

CONCORDANCE

I, IX-292:

Salomon Maimon's Lebensgeschichte. Von ihm selbst geschrieben und herausgegeben von K. P. Moritz. In zwei Theilen. Berlin, 1792. bei Friedrich Vieweg dem ältern.

I, 293-588:

Salomon Maimon's Lebensgeschichte. Von ihm selbst geschrieben und herausgegeben von K. P. Moritz. Zweiter und letzter Theil. Berlin, 1793. bei Friedrich Vieweg dem ältern.

I, 589-597:

Probe Rabbinischer Philosophie. In: Berlinische Monatsschrift. 1789, Bd. XIV, 171-179.

I, 599-616:

Ueber Wahrheit. Ein Brief des Hrn. S Maimon, an seinen edlen Freund L. in Berlin. In: Berlinisches Journal für Aufklärung. 1789, Bd. V/1, 67-84.

II, VII-442:

Versuch über die Transscendentalphilosophie mit einem Anhang über die symbolische Erkenntniß und Anmerkungen von Salomon Maimon, aus Litthauen in Polen. Berlin, bei Christian Friedrich Voß und Sohn. 1790.

II, 469-498:

Ueber Wahrheit. Schreiben des Herrn Maimon an Herrn Tieftrunk. In: Berlinisches Journal für Aufklärung. 1790, Bd. VII/1, 22-51.

II, 499-522:

Baco und Kant. Schreiben des H. S. Maimon an den Herausgeber dieses Journals. In: Berlinisches Journal für Aufklärung. 1790, Bd. VII/2, 99-122.

II, 523-566:

Ueber Wahrheit, an den Herrn S. Maimon. Von J. H. Tieftrunk. In: Berlinisches Journal für Aufklärung. 1790, Bd. VIII/2, 115-158. [author: J. H. Tieftrunk; notes: A. Riem and S. Maimon]

III, 1-246:

Philosophisches Wörterbuch, oder Beleuchtung der wichtigsten Gegenstände der Philosophie, in alphabetischer Ordnung, von Salomon Maimon. Erstes Stück. Berlin. Bei Johann Friedrich Unger. 1791.

III, 247-253:

Ueber den Plan des Magazins zur Erfahrungsseelenkunde. Auszug aus einem Briefe an den Herausgeber, von Herrn Salomon Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1791, Bd. VIII/3, 1-7.

III, 254-262:

Wirkung des Denkvermögens auf die Sprachwerkzeuge. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1791, Bd. VIII/3, 8-16.

III, 263-275:

Ueber Selbsttäuschung. In Bezug auf den vorhergehenden Aufsatz. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1791, Bd. VIII/3, 38-50.

III, 276-298:

Ueber das Vorhersehungsvermögen. In: Deutsche Monatschrift. 1791, Bd. II, 45-67.

III, 299-308:

Ueber Stetigkeit in der Natur. In: Deutsche Monatsschrift. 1791, Bd. II, 136-145.

III, 309-331:

Ueber die Theodicee. In: Deutsche Monatsschrift. 1791, Bd. III, 190-212.

III, 332-339:

Schreiben des Herrn Salomon Maimon an den Herausgeber, (den vorstehenden Artikel betreffend.) In: Annalen der Akademie der Künste und mechanischen Wissenschaften zu Berlin. 1791, 78-85.

III, 340-350:

Ankündigung und Aufforderung zu einer allgemeinen Revision der Wissenschaften. Einer Königlichen Akademie der Wissen

schaften zu Berlin vorgelegt. In: Deutsche Monatsschrift. 1792, Bd. III, 42-52.

III, 351-373:

Ueber den Plan des Magazins zur Erfahrungsseelenkunde. Auszug aus einem Briefe von S. M. an K. P. M. Fortsetzung. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 1-23.

III, 374-392:

Ueber den Traum und über das Divinationsvermögen. (Als eine Fortsetzung des vierten Aufsatzes 3ten Stücks 8ten Bands.) In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 70-88.

III, 393-399:

Von S. M. an K. P. M. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 90-96.

III, 400-417:

Schreiben an Herrn K. P. Moritz, mit Anmerkungen von Herrn S. Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/1, 109-126. [author: J. H. Mathy; notes: S. Maimon]

III, 418-455:

Obereits Widerruf für Kant. Ein psychologischer Kreislauf. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/2, 106-143. [author: J. H. Obereit; notes: S. Maimon]

III, 456-461:

Antwort auf das Schreiben des Herrn Obereit an Herrn S. Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/3, 100-105.

III, 462-490:

Einleitung zur neuen Revision des Magazins zur Erfahrungsseelenkunde. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1792, Bd. IX/3, 1-28.

IV, 1-294:

Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil. Berlin, 1793. bei Wilhelm Vieweg.

IV, 295-530:

Bacons von Verulam Neues Organon. Aus dem Lateinischen übersetzt von George Wilhelm Bartoldy. Mit Anmerkungen von Salomon Maimon. Zwei Bände. Mit Kupfern. Berlin, bei Gottfried Carl Nauck. 1793.

IV, 531-580:

Anfangsgründe der Newtonischen Philosophie von Dr. Pemberton. Aus dem Englischen mit Anmerkungen und einer Vorrede von Salomon Maimon. Erster Theil mit vier Kupfertafeln. Berlin, bei Friedrich Maurer 1793.

IV, 583-592:

Revision der Erfahrungsseelenkunde. Von Salomon [sic!] Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/1, 1-10.

IV, 593-598:

Sprache in psychologischer Rücksicht. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/1, 11-16.

IV, 599-605:

Fortsetzung der Revision der Erfahrungsseelenkunde. Von Salomon Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/2, 1-7.

IV, 607-609:

Einleitung zur Realübersicht des Magazins zur Erfahrungsseelenkunde. Von Salomon Maimon. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/3, 1-3.

IV, 611-616:

Ueber die Schwärmerei. In: Gnothi Seauton oder Magazin zur Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, X/2, 43-48.

IV, 617-652:

Auszug aus Jordan Bruno von Nola. Von der Ursache, dem Prinzip und dem Einem. In: Gnothi Seauton oder Magazin zur

Erfahrungsseelenkunde als ein Lesebuch für Gelehrte und Ungelehrte. 1793, Bd. X/2, 49-84.

V:

Versuch einer neuen Logik oder Theorie des Denkens. Nebst angehängten Briefen des Philaletes an Aenesidemus. Von Salomon Maimon. Berlin, 1794. Bei Ernst Felisch.

VI, 1-271:

Die Kathegorien des Aristoteles. Mit Anmerkungen erläutert und als Propädeutik zu einer neuen Theorie des Denkens dargestellt von Salomon Maimon. Berlin, 1794. Bei Ernst Felisch.

VI, 274-325:

Versuch einer neuen Darstellung des Moralprinzips und Deduktion seiner Realität. In: Berlinische Monatsschrift. 1794, Bd. XXIV, 402-453.

VI, 327-360:

Ueber die ersten Gründe des Naturrechts. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1795, Bd. I/2, 141-174.

VI, 362-396:

Ueber den Gebrauch der Philosophie zur Erweiterung der Erkenntniß. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1795, Bd. II/1, 1-35.

VI, 398-420:

Das Genie und der methodische Erfinder. In: Berlinische Monatsschrift. 1795, Bd. XXVI, 362-384.

VI, 423-425:

[Letter to Immanuel Kant, 7 April 1789.] In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Band XI. Berlin 1900, 15-17.

VI, 426-427:

[Letter to Immanuel Kant, July 1789.] In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Band XI. Berlin 1900, 66-67.

VI, 428:

[Letter to Immanuel Kant, 9 May 1790.] In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Band XI. Berlin 1900, 167.

VI, 429-431:

[Letter to Immanuel Kant, 15 May 1790.] In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Band XI. Berlin 1900, 169.

VI, 432:

[Letter by Karl Philipp Moritz and Maimon to Immanuel Kant, 14 May 1791.] In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Band XI. Berlin 1900, 246.

VI, 433-435:

[Letter to Immanuel Kant, 20 September 1791.] In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Band XI. Berlin 1900, 272-274.

VI, 436-441:

[Letter to Immanuel Kant, 30 November 1792.] In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Band XI. Berlin 1900, 374-379.

VI, 442-443:

[Letter to Immanuel Kant, 2 December 1793.] In: Kant's gesammelte Schriften. Herausgegeben von der Königlich Preußischen Akademie der Wissenschaften. Band XI. Berlin 1900, 452-453.

VI, 446-448:

[Letter to Karl Leonhard Reinhold, no date.] In: Karl Leonhard Reinhold's Leben und litterarisches Wirken, nebst einer Auswahl von Briefen Kant's, Fichte's, Jacobi's und anderer philosophirender Zeitgenossen an ihn, herausgegeben von Ernst Reinhold. Jena 1825, 374-376.

VI, 449-450:

[Letter to Johann Gottlieb Fichte, 16 August 1794.] In: J.G. Fichte. Briefwechsel. Kritische Gesamtausgabe. Gesammelt und herausgegeben von Hans Schulz. Zweite, um einen Nachtrag vermehrte Auflage. Leipzig 1930, Bd. 1, 401-402.

VI, 451-452:

[Letter to Johann Gottlieb Fichte, 16 October 1794.] In: J.G. Fichte. Briefwechsel. Kritische Gesamtausgabe. Gesammelt und herausgegeben von Hans Schulz. Zweite, um einen Nachtrag vermehrte Auflage. Leipzig 1930, Bd. 1, 406-407.

VII, I-373:

Kritische Untersuchungen über den menschlichen Geist oder das höhere Erkenntniß- und Willensvermögen von Salomon Maimon. Leipzig, bei Gerhard Fleischer dem Jüngern. 1797.

VII, 374-405:

Pragmatische Geschichte des Begriffs von Philosophie, und Beurtheilung der neuern Methode zu philosophiren. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1797, Bd. VI/2, 150-181.

VII, 406-451:

Die philosophische SprachVerwirrung. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1797, Bd. VII/3, 213-258.

VII, 452-477:

Ueber die ersten Gründe der Moral. In: Philosophisches Journal einer Gesellschaft Teutscher Gelehrter. 1798, Bd. VIII/3, 165-190.

VII, 481-520:

Der große Mann. In: Neue Berlinische Monatsschrift, 1799. Bd. II, 244-283.

VII, 521-532:

Erklärung einer allgemeinbekannten merkwürdigen anthropologischen Erscheinung. In: Neue Berlinische Monatsschrift. 1800, Bd. III, 61-72.

VII, 533-554:

Der moralische Skeptiker. In: Berlinisches Archiv der Zeit und ihres Geschmacks. 1800, Bd. II, 271-292.

VII, 557-560:

[Letter to Peina, 3 November 1799.] In: Kronos. ein Archiv der Zeit. 1801, Bd. 1, 30-33.

VII, 560-562:

[Letter to Peina, 5 November 1799.] In: Kronos. ein Archiv der Zeit. 1801, Bd. 1, 33-35.

VII, 562-564:

[Letter to Peina, 17 May 1800.] In: Kronos. ein Archiv der Zeit. 1801, Bd. 1, 35-37.

VII, 565-567:

[Letter to Peina, 20 October 1800.] In: Kronos. ein Archiv der Zeit. 1801, Bd. 1, 38-40.

VII, 567-571:

[Letter to Peina, 7 November 1800.] In: *Kronos. ein Archiv der Zeit.* 1801, Bd. 1, 40-44.

VII, 571-573:

[Brief an Peina, 10 November 1800.] In: *Kronos. ein Archiv der Zeit.* 1801, Bd. 1, 44-46.

VII, 575-607:

Sophistik des menschlichen Herzens. In: *Neue Berlinische Monatsschrift.* 1801, Bd. V, 44-76.

VII, 610-623:

Ideen und Plane zu neuen Untersuchungen. Aus Salomon Maimon's hinterlassenen Papieren. In: *Neues Museum der Philosophie und Litteratur.* 1803, Bd. I/1, 145-160.

VII, 627-648:

Salomon Maimon's Geschichte seiner philosophischen Autorschaft, in Dialogen. Aus seinen hinterlassenen Papieren. In: *Neues Museum der Philosophie und Litteratur.* 1804, Bd. II/1, 125-146.

VII, 649-666:

Ideen und Plane. Aus Salomon Maimon's hinterlassenen Papieren. Fortsetzung und Beschluß. In: *Neues Museum der Philosophie und Litteratur.* 1804, Bd. II/2, 139-156.

VII, 667-670:

Salomon Maimon's kritisches Gutachten über die Kantische Philosophie. Als Beschluß des Aufsatzes No. VI. im vorigen Hefte. In: *Neues Museum der Philosophie und Litteratur.* 1804, Bd. II/2, 159-162.

VII, 673-679:

[Über das Projekt einer Gesellschaft zur Beförderung der Menschenkenntnis.] In: *Maimoniana. Oder Rhapsodien zur Charakteristik Salomon Maimon's.* Aus seinem Privatleben gesammelt von Sabattia Joseph Wolff. Berlin 1813, 143-149.

ABBREVIATIONS

References to Maimon's works are given in the text, by volume and page number of the Valerio Verra edition of Maimon's *Gesammelte Werke* (Hildesheim, *et al.*: 1965-1976 [2000]).

1. *Salomon Maimon*

Baco

- *Bacons von Verulam Neues Organon*. Aus dem Lateinischen übersetzt von George Wilhelm Bartoldy. Mit Anmerkungen von Salomon Maimon. Zwei Bände. Mit Kupfern. Berlin, bei Gottfried Carl Nauck. 1793.

Gibeath Hamore

- *More Nebuchim. Sive Liber Doctor Perplexorum Auctore R. Mose Majemonide Arabico Idiomate Conscriptus, R. Samuele Abben Thibbone In Linguam Hebraeam Translatus, Novis Commentaris Uno R. Mosis Narbonnensis, Ex Antiquissimis Manuscriptis Depromto; Altero Anonymi Cujusdam, Sub Nomine Gibeath Hamore Adauctus, Nunc In Lucem Editus Cura Et Impensis Isaaci Eucheli. Berolini, Officina Scholae Liberae Judaicae MDCCXCI.* [in Hebrew]

Giv'at Hammore

- *Giv'at Hammore*. New Edition with Notes and Indexes by Samuel Hugo Bergman and Nathan Rotenstreich. Jerusalem: The Israel Academy of Sciences and Humanities, 1965. Reprinted 2000. [in Hebrew]

KdA

- *Die Kathogorien des Aristoteles*. Mit Anmerkungen erläutert und als Propädeutik zu einer neuen Theorie des Denkens dargestellt von Salomon Maimon. Berlin, 1794.

KrU

- *Kritische Untersuchungen über den menschlichen Geist oder das höhere Erkenntniß- und Willensvermögen von Salomon Maimon*. Leipzig, bei Gerhard Fleischer dem Jüngern. 1797.

Leben

- Salomon Maimon's Lebensgeschichte. Von ihm selbst geschrieben und herausgegeben von K. P. Moritz. In zwei Theilen. Berlin, 1792.
- Salomon Maimon's Lebensgeschichte. Von ihm selbst geschrieben und herausgegeben von K. P. Moritz. Zweiter und letzter Theil. Berlin, 1793.

Logik

- Versuch einer neuen Logik oder Theorie des Denkens. Nebst angehängten Briefen des Philaletes an Aenesidemus. Von Salomon Maimon. Berlin, 1794.

Pemberton

- Anfangsgründe der Newtonischen Philosophie von Dr. Pemberton. Aus dem Englischen mit Anmerkungen und einer Vorrede von Salomon Maimon. Erster Theil mit vier Kupfertafeln. Berlin, bei Friedrich Maurer 1793.

PhW

- Philosophisches Wörterbuch, oder Beleuchtung der wichtigsten Gegenstände der Philosophie, in alphabetischer Ordnung, von Salomon Maimon. Erstes Stück. Berlin. Bei Johann Friedrich Unger. 1791.

Prg

- Ueber die Progressen der Philosophie veranlaßt durch die Preisfrage der königl. Akademie zu Berlin für das Jahr 1792: Was hat die Metaphisik seit Leibniz und Wolf für Progressen gemacht? Von Salomon Maimon. Berlin 1793.

Strf

- Salomon Maimon's Streifereien im Gebiete der Philosophie. Erster Theil. Berlin, 1793.

Tr

- Versuch über die Transscendentalphilosophie mit einem Anhang über die symbolische Erkenntniß und Anmerkungen von Salomon Maimon, aus Litthauen in Polen. Berlin, bei Christian Friedrich Voß und Sohn. 1790.

2. *Others**Immanuel Kant*

AA

- *Kant's gesammelte Schriften*, ed. Königl. Preußische [later Deutsche] Akademie der Wissenschaften. Berlin: Georg Reimer [later Walter de Gruyter]. 1900- .

CpR

- *Critique of Pure Reason*. [References are to the paginations of the first (1781) and second (1787) editions, indicated as "A" and "B," respectively. Translation as indicated.]

Johann Gottlieb Fichte

GA

- *Gesamtausgabe der Bayerischen Akademie der Wissenschaften*, ed. Reinhard Lauth, Hans Jacob and Hans Gliwitzky. Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1962.

Grundlage

- *Grundlage der gesamten Wissenschaftslehre*. Leipzig: C.E. Gabler, 1794.

SW

- *Sämmtliche Werke*, ed. Immanuel Hermann Fichte. Berlin: Veit & Comp., 1845-6.

BIBLIOGRAPHY

- Albert, Karl. *Meister Eckharts These vom Sein. Untersuchungen zur Metaphysik des Opus tripartitum*. Saarbrücken, Kastellaun: Henn, 1976.
- Allison, Henry E. *Kant's Transcendental Idealism. An Interpretation and Defense*. New Haven: Yale University Press, 1983.
- "The Originality of Kant's Distinction between Analytic and Synthetic Judgments," in *The Philosophy of Immanuel Kant*, ed. Richard Kennington. Washington, D.C.: The Catholic University of America Press, 1985, 15-38.
- *Idealism and Freedom. Essays on Kant's Theoretical and Practical Philosophy*. Cambridge: Cambridge University Press, 1996.
- Alston, William. "Varieties of Privileged Access," *American Philosophical Quarterly*, 8 (1971), 223-241.
- Ameriks, Karl. "Kant's Transcendental Deduction as a Regressive Argument," *Kant-Studien*, 69 (1978), 273-287.
- *Kant's Theory of Mind. An Analysis of the Paralogisms of Pure Reason*. Cambridge: Cambridge University Press, 1982, reprinted 2000a.
- "The Critique of Metaphysics: Kant and Traditional Ontology," in *The Cambridge Companion to Kant*, ed. Paul Guyer. Cambridge: Cambridge University Press, 1992, 249-279.
- *Kant and the Fate of Autonomy. Problems in the Appropriation of the Critical Philosophy*. Cambridge: Cambridge University Press, 2000b.
- Aquinas, Thomas. *Summa Theologica*, in *Opera Omnia*, vol. 1, reprinted New York: Musurgia Publishers, 1948.
- Arnauld, Antoine and Nicole, Pierre. *La Logique ou l'Art de Penser. Contenant, Outre les Regles Communes, Plusieurs Observations Nouvelles Propres à Former le Jugement*. Paris 1662, reprinted Hildesheim and New York: G. Olms, 1970.
- Atlas, Samuel. "Solomon Maimon's Treatment of the Problem of Antinomies and its Relation to Maimonides," *Hebrew Union College Annual*, 21 (1948), 105-153.
- "Solomon Maimon's Doctrine of Infinite Reason and its Historical Relations," *Journal of the History of Ideas*, 13 (1952), 168-187.
- *From Critical to Speculative Idealism. The Philosophy of Solomon Maimon*. The Hague: Nijhoff, 1964.
- Bacher, W., Brann, M., and Simonsen D., eds. *Moses ben Maimon. Sein Leben, seine Werke und sein Einfluss*. Leipzig: G. Fock, 1908-14, reprinted Hildesheim and New York: G. Olms, 1971.
- Bacon, Francis. *The New Organon and Related Writings*, ed. Fulton H. Anderson. Indianapolis et al.: Bobbs Merrill, 1960.
- Baumgarten, Alexander Gottlieb. *Metaphysik*, trans. Georg Friedrich Meier. Halle: Hemmerde, 1766.
- Beck, Lewis White. *Essays on Kant and Hume*. New Haven: Yale University Press, 1978.
- Beiser, Frederick. *The Fate of Reason. German Philosophy from Kant to Fichte*. Cambridge, MA: Harvard University Press, 1987.
- *German Idealism: The Struggle against Subjectivism, 1781-1801*. Cambridge, MA: Harvard University Press, 2002.

- Bergman, Samuel Hugo. "Solomon Maimon and Moses ben Maimon," *Moznaim*, 3 (1945), 483-92. [in Hebrew]
- *The Philosophy of Solomon Maimon*, trans. Noah J. Jacobs. Jerusalem: Magnes Press, 1967.
- *Introduction to Logic*. Jerusalem: Mosad Bialik, 1975. [in Hebrew]
- Bernoulli, Daniel. *Examen Principiorum Mechanicae, et Demonstrationes Geometricae de Compositione et Resolutione Virium*, in *Die Werke von Daniel Bernoulli*, vol. 3, ed. David Speiser et al. Basel et al.: Birkhäuser, 1987, 119-135.
- Bogen, James and McGuire, James E., eds. *How Things Are. Studies in Predication and the History of Philosophy and Science*. Dordrecht et al.: D. Reidel, 1985.
- Bolzano, Bernard. *Wissenschaftslehre in vier Bänden*, ed. Wolfgang Schulz. 2nd ed. Leipzig: F. Meiner, 1929-1931.
- Bransen, Jan. *The Antinomy of Thought: Maimonian Skepticism and the Relation between Thoughts and Objects*. Dordrecht et al.: Kluwer Academic Publishers, 1991.
- Breazeale, Daniel. "Fichte on Skepticism," *Journal of the History of Philosophy*, 29 (1991), 427-453.
- Brody, Baruch. "Leibniz's Metaphysical Logic," *Rice University Studies*, 63/4 (1977), 43-55.
- Bruckstein, A. *Radical Readings in Jewish Philosophy – Hermann Cohen on Maimonides' Ethics. Translation and Commentary*. Syracuse. Forthcoming.
- Buchdahl, Gerd. *Metaphysics and the Philosophy of Science. The Classical Origins: Descartes to Kant*. Cambridge, MA: MIT Press, 1969.
- Buzaglo, Meir. *Solomon Maimon: from Philosophy of Mathematics to Transcendental-Rationalism*. PhD dissertation. Jerusalem: Hebrew University of Jerusalem, 1992. [in Hebrew]
- *Solomon Maimon: Monism, Skepticism, and Mathematics*. Pittsburgh: University of Pittsburgh Press, 2002.
- Cartwright, Nancy. *How the Laws of Physics Lie*. Oxford: Clarendon Press; New York: Oxford University Press, 1983.
- Cassirer, Ernst. *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit*, vol. 3: *Die nachkantischen Systeme*. Berlin: Bruno Cassirer, 1920, reprinted Darmstadt: Wissenschaftliche Buchgesellschaft, 1974.
- *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit. Dritter Band: Die nachkantischen Systeme*, in *Gesammelte Werke. Hamburger Ausgabe*, vol. 4. Hamburg: F. Meiner, 2000.
- Chisholm, Roderick M. *Theory of Knowledge*. Englewood Cliffs, N. J.: Prentice-Hall, 1989.
- Cohen, Hermann. *Kants Theorie der Erfahrung*. 3rd ed. Berlin: Bruno Cassirer, 1918.
- Damerow, Peter et al. *Exploring the Limits of Preclassical Mechanics: a Study of Conceptual Development in Early Modern Science: Free Fall and Compound Motion in the Work of Descartes, Galileo, and Beekman*. Berlin et al.: Springer, 1992.
- Deleuze, Gilles. *Difference and Repetition*, trans. Paul Patton. London: Athlone Press, 1994. New York: Columbia University Press, 1994.
- Descartes, René. *Œuvres*, eds. Charles Adam and Paul Tannery. Paris: J. Vrin, 1964-76.
- Eckartshausen, Karl von. *Zahlenlehre der Natur, oder: Die Natur zählt und spricht; Was sind ihre Zahlen? Was sind ihre Worte? Ein Schlüssel zu den Hieroglyphen der Natur*. Leipzig: G.E. Beer, 1794.
- Engstler, Achim. *Untersuchungen zum Idealismus Salomon Maimons*. Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1990.

- “Zwischen Kabbala und Kant. Salomon Maimons ‚streifende‘ Spinoza-Rezeption,” in *Spinoza in der europäischen Geistesgeschichte*, ed. Hanna Delf, Julius H. Schoeps and Manfred Walther. Berlin: Edition Hentrich, 1994, 162-192.
- Engstrom, Stephen. “The Transcendental Deduction and Skepticism,” *Journal of the History of Philosophy*, 32 (1994), 359-380.
- Erdmann, Johann Eduard. *Versuch einer wissenschaftlichen Darstellung der Geschichte der neuern Philosophie. Fünfter Band. Die Entwicklung der deutschen Spekulation seit Kant*. Leipzig 1848, reprinted Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1977.
- Euler, Leonhard. *Mechanica: sive motus scientia analytice exposita*, in *Leonhardi Euleri Opera Omnia*, ser. 2, tom. I. Leipzig: Teubner, 1912.
- Falkenstein, Lorne. *Kant’s Intuitionism: A Commentary on the Transcendental Aesthetic*. Toronto: University of Toronto Press, 1995.
- Fichte, Johann Gottlieb. *Early Philosophical Writings*, trans. and ed. by Daniel Breazeale. Ithaca and London: Cornell University Press, 1988.
- Forsyth, T. M. “Spinoza’s Doctrine of God in Relation to his Concept of Causality,” in *Studies in Spinoza: Critical and Interpretive Essays*, ed. S. Paul Kashap. Berkeley: University of California Press, 1972, 3-15.
- Franks, Paul. “All or Nothing: Systematicity and Nihilism in Jacobi, Reinhold, and Maimon,” in *The Cambridge Companion to German Idealism*, ed. Karl Ameriks. Cambridge: Cambridge University Press, 2000, 95-116.
- *All or Nothing: Skepticism, Transcendental Argument and Systematicity in German Idealism*. Cambridge, MA: Harvard University Press. Forthcoming a.
- “Skepticism after Kant,” in *Skepticism and Interpretation*, eds. Andrea Kern and James Conant. Forthcoming b.
- Freudenthal, Gideon. *Atom and Individual in the Age of Newton: on the Genesis of the Mechanistic World View*. Dordrecht et al.: Reidel, 1986.
- “Die Autarkie des Salomon Maimon,” in *Geschichtliche Welt und menschliches Wesen. Beiträge zum Bedenken der conditio humana in der europäischen Geistesgeschichte*, eds. Lars Lambrecht and Eva-Maria Tschurenev. Frankfurt a. M. et. al.: 1994, 15-35.
- “The Autarky of Salomon Maimon,” thoroughly revised and substantially enlarged version of preceding entry. Tel Aviv: The Open University of Israel, 2002a. [in Hebrew]
- “Radikale und Kompromißler in der Philosophie – Salomon Maimon über Mendelssohn, den ‚philosophischen Heuchler,‘” *Tel Aviver Jahrbuch für deutsche Geschichte*, 30 (2002b), 369-385.
- Friedman, Michael. *Kant and the Exact Sciences*. Cambridge, MA: Harvard University Press, 1992a.
- “Causal Laws and the Foundations of Natural Science,” in *The Cambridge Companion to Kant*, ed. Paul Guyer. Cambridge: Cambridge University Press, 1992b, 161-199.
- “Logical Form and the Order of Nature. Comments on Béatrice Longuenesse’s *Kant and the Capacity to Judge*,” *Archiv für Geschichte der Philosophie*, 82 (2000), 202-215.
- “Kant on Science and Experience,” in *Kant und die Berliner Aufklärung. Akten des IX. Internationalen Kant-Kongresses*, eds. Volker Gerhardt, Rolf-Peter Horstmann and Ralph Schumacher, vol. 1. Berlin: de Gruyter, 2001, 233-245.
- Fromer, Jakob. “Maimons Philosophie,” in *Salomon Maimons Lebensgeschichte*, ed. Jakob Fromer. München: G. Müller, 1911, 39-63.

- Gettier, Edmund L. "Is Justified True Belief Knowledge?" *Analysis*, 23 (1963), 121-123.
- Gilson, Étienne. *Index Scolastico-Cartésien*. 2nd ed. Paris: J. Vrin, 1979.
- Glockner, Hermann. *Die europäische Philosophie von den Anfängen bis zur Gegenwart*. Stuttgart: Reclam, 1958.
- Goodman, L. E. "Matter and Form as Attributes of God in Maimonides' Philosophy," in *A Straight Path: Studies in Medieval Philosophy and Culture. Essays in Honor of Arthur Hymen*, eds. Ruth Link-Salinger et al., Washington D.C.: The Catholic University of America Press, 1988, 86-97.
- Grajewski, Maurice J. *The Formal Distinction of Duns Scotus: A Study in Metaphysics*. Washington, D. C.: The Catholic University of America Press, 1944.
- Gram, Moltke S. *Kant, Ontology and the A Priori*. Evanston, Ill.: Northwestern University Press, 1968.
- Granger, Gilles Gaston. *La Théorie Aristotélicienne de la Science*. Paris: Aubier Montaigne, 1976.
- Grosholz, Emily and Yakira, Elhanan. *Leibniz's Science of the Rational*. Stuttgart: F. Steiner Verlag, 1998.
- Grün, Klaus-Jürgen. *Vom unbewegten Bewegter zur bewegenden Kraft. Der pantheistische Charakter der Impetustheorie im Mittelalter*. Paderborn: mentis, 1999.
- Guérout, Martial. *La Philosophie Transcendantale de Salomon Maïmon*. Paris: Alcan, 1929.
- Guttman, Jacob. "Lazarus Bendauid. Seine Stellung zum Judentum und seine literarische Wirksamkeit," *Monatsschrift für Geschichte und Wissenschaft des Judentums*, 61 (1917), 207-211.
- Guyer, Paul. *Kant and the Claims of Knowledge*. Cambridge: Cambridge University Press, 1987.
- "The Transcendental Deduction of the Categories," in *The Cambridge Companion to Kant*, ed. Paul Guyer. Cambridge: Cambridge University Press, 1992, 123-160.
- "Absolute Idealism and the Rejection of Kantian Dualism," in *The Cambridge Companion to German Idealism*, ed. Karl Ameriks. Cambridge: Cambridge University Press, 2000, 37-56.
- Harvey, Warren Zev. "The Return of Maimonideanism," *Jewish Social Studies*, 42 (1980), 249-68.
- Hayoun, Maurice-Ruben. "Salomon Maïmon, Moïse Maïmonide et Kant," in *La Philosophie Allemande dans la Pensée Juive*, ed. Gérard Bensussan. Paris: PUF, 1997, 15-65.
- Hegel, Georg Wilhelm Friedrich. *Hegel's Science of Logic*, trans. Arnold V. Miller. Amherst, N.Y.: Humanity Books, 1998 .
- Heidegger, Martin. *Kant and the Problem of Metaphysics*, trans. Richard Taft. Bloomington: Indiana University Press, 1990.
- *Phenomenological Interpretation of Kant's Critique of Pure Reason*, trans. Parvis Emad and Kenneth Maly. Bloomington: Indiana University Press, 1997.
- Henrich, Dieter. *The Unity of Reason: Essays on Kant's Philosophy*, ed. Richard Velkley. Cambridge, MA: Harvard University Press, 1994.
- Hoffmeister, Johannes, ed. *Wörterbuch der philosophischen Begriffe*, 2nd ed. Hamburg: F. Meiner, 1955.
- Hume, David. *A Treatise of Human Nature*, ed. Peter H. Nidditch. Oxford: Clarendon Press, 1978.
- Ishiguro, Hidé. *Leibniz's Philosophy of Logic and Language*. London: Duckworth, 1972.

- Jacobi, Friedrich Heinrich. *Schriften zum Spinozastreit*, in *Werke*, vol. 1/1, eds. Klaus Hammacher and Irmgard-Maria Piske. Hamburg: F. Meiner; Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1998.
- Jakob, Ludwig Heinrich von. *Prüfung der Mendelssohnschen Morgenstunden oder aller spekulativen Beweise für das Daseyn Gottes in Vorlesungen von Ludwig Heinrich Jakob Doktor der Philosophie in Halle. Nebst einer Abhandlung von Herrn Professor Kant*. Leipzig: J.S. Heinsius, 1786.
- ed. *Annalen der Philosophie und des philosophischen Geistes von einer Gesellschaft gelehrter Männer. Herausgegeben von Ludwig Heinrich Jakob, Professor der Philosophie in Halle*. Halle und Leipzig: Kleefeldsche Buchhandlung, 1795-1797.
- Janiak, Andrew. *Kant's Newtonianism*. PhD. Dissertation. Bloomington: Indiana University Bloomington, 2001.
- Kabitz, Willy. *Studien zur Entwicklungsgeschichte der Fichteschen Wissenschaftslehre aus der kantischen Philosophie*. 2nd ed. Berlin: Reuther and Reichard, 1912.
- Kambouchner, Denis. *L'Homme des Passions: Commentaires sur Descartes*. Paris: Albin Michel, 1995.
- Kant, Immanuel. *Prolegomena to Any Future Metaphysics*, trans. Lewis White Beck. Indianapolis: Bobbs-Merrill [now Macmillan], 1950.
- *Critique of Pure Reason*, trans. Norman Kemp Smith. New York: St. Martin's Press, 1965; London: Macmillan, 1978, reprinted 1985.
- *Kant: Philosophical Correspondence 1759-99*, trans. Arnulf Zweig. Chicago: University of Chicago Press, 1967.
- *The Kant-Eberhard Controversy*, trans. Henry E. Allison. Baltimore: The Johns Hopkins University Press, 1973.
- *Critique of Judgment: Including the First Introduction*, trans. Werner S. Pluhar. Indianapolis: Hackett, 1987.
- *Theoretical Philosophy 1755-1770*, trans. and ed. David Walford in collaboration with Ralf Meerbote. Cambridge: Cambridge University Press, 1992.
- "An answer to the question: What is enlightenment," in *Practical Philosophy*, trans. Mary. J. Gregor. Cambridge: Cambridge University Press, 1996, 15-22.
- *Critique of Pure Reason*, trans. and eds. Paul Guyer and Allen W. Wood. Cambridge: Cambridge University Press, 1998.
- *Theoretical Philosophy after 1781*, eds. Henry Allison and Peter Heath, trans. Gary Hatfield, Michael Friedman, Henry Allison and Peter Heath. Cambridge: Cambridge University Press, 2002.
- Katzoff, Charlotte. "Solomon Maimon's Interpretation of Kant's Copernican Revolution," *Kant-Studien* 66 (1975), 342-356.
- Kitcher, Philip. "How Kant Almost Wrote 'Two Dogmas of Empiricism'," in *Essays on Kant's Critique of Pure Reason*, eds. J.N. Mohanty and Robert W. Shahan. Norman: University of Oklahoma Press, 1982, 217-249.
- Klapp, Eckhard. *Die Kausalität bei Salomon Maimon*. Meisenheim am Glan: A. Hain, 1968.
- Körner, Stephan. *The Philosophy of Kant*. London: Penguin, 1955.
- Krämer, Felix. "Maimons Versuch über Transzendentalphilosophie. Eine interpretierende Skizze der Grundgedanken," *Fichte-Studien*, 1 (1990), 178-197.
- Kripke, Saul A. *Naming and Necessity*. Cambridge, MA: Harvard University Press, 1980.
- Kroner, Richard. *Von Kant bis Hegel*. Tübingen: J.C.B. Mohr, 1921.
- Kuntze, Friedrich. *Die Philosophie Salomon Maimons*. Heidelberg: C. Winter, 1912a.
- "Salomon Maimons theoretische Philosophie und ihr Ort in einem System des Kritizismus," *Logos*, 3 (1912b), 285-308.

- Lachterman, David R. "Mathematical Construction, Symbolic Cognition and the Infinite Intellect: Reflections on Maimon and Maimonides," *Journal of the History of Philosophy*, 30 (1992), 497-522.
- Lask, Emil. *Fichtes Idealismus und die Geschichte*, in *Gesammelte Schriften*, vol. 1, ed. Eugen Herriegl. Tübingen: J.C.B. Mohr, 1923, 1-274.
- Lehmann, Gerhard. *Geschichte der nachkantischen Philosophie. Kritizismus und kritisches Motiv in den philosophischen Systemen des 19. und 20. Jahrhunderts*. Berlin: Junker and Dünnhaupt, 1931.
- . *Der Einfluß des Judentums auf das französische Denken der Gegenwart*. Berlin: Junker and Dünnhaupt, 1940.
- Leibniz, Gottfried Wilhelm. *Opuscles et Fragments Inédits de Leibniz: Extraits des Manuscrits de la Bibliothèque Royale de Hanovre*, ed. Louis Couturat. Paris: F. Alcan, 1903.
- . *The Leibniz-Clarke Correspondence*, ed. H. G. Alexander. Manchester: Manchester University Press, 1956a.
- . *Philosophical Papers and Letters*, trans. Leroy E. Loemker. Chicago: The University of Chicago Press, 1956b.
- . "Necessary and Contingent Truths," in *Philosophical Writings*, trans. Gorge Henry Radcliffe Parkinson and Mary Morris. London: Dent, 1973, 96-105.
- . *Philosophical Essays*, trans. Roger Ariew and Daniel Garber. Indianapolis: Hackett, 1989.
- . *New Essays Concerning Human Understanding*, trans. Peter Remnant and Jonathan Bennett. 2nd ed. Cambridge: Cambridge University Press, 1996.
- Levy, Zev. *Spinoza's Interpretation of Judaism*. Tel Aviv: Ha-Kibutz Ha-Artzi, 1972. [in Hebrew]
- Longuenesse, Béatrice. *Kant et le Pouvoir de Juger: Sensibilité et Discursivité dans l'Analytique Transcendentale de la Critique de la Raison Pure*. Paris: PUF, 1993.
- . "The Transcendental Ideal and the Unity of the Critical System," in *Proceedings of the Eighth International Kant Congress*, ed. Hoke Robinson, vol. 1, part 2. Milwaukee: Marquette University Press, 1995, 521-537.
- . *Kant and the Capacity to Judge: Sensibility and Discursivity in the Transcendental Analytic of the Critique of Pure Reason*, trans. Charles T. Wolfe. Princeton, N.J.: Princeton University Press, 1998.
- Mach, Ernst. *The Science of Mechanics: A Critical and Historical Accounts of its Development*, trans. Thomas J. McCormack. LaSalle: Open Court, 1960.
- Maimonides, Moses. *The Guide of the Perplexed*, trans. Shlomo Pines, with an Introductory Essay by Leo Strauss. Chicago: The University of Chicago Press, 1963, reprinted Chicago: The University of Chicago Press, 1999.
- Martin, Wayne M. *Idealism and Objectivity: Understanding Fichte's Jena Project*. Stanford: Stanford University Press, 1997.
- McDowell, John. *Mind and World*. Cambridge, MA: Harvard University Press, 1994.
- Melamed, Yitzhak. "Sources of Difference," 1997. [unpublished manuscript]
- Mendelssohn, Moses. *Morgenstunden, oder Vorlesungen über das Dasein Gottes*, in *Schriften zur Philosophie, Aesthetik und Apologetik*, ed. Moritz Brasch, vol. 1. Leipzig 1880, 299-460, reprinted Hildesheim: G. Olms, 1968.
- Nacht, S. "Aristotle's Teachings concerning Specific Difference and Maimon's Law of Determinability," *Iyyun*, 7 (1953), 203-218. [in Hebrew]
- Newton, Isaac. *The Correspondence of Isaac Newton*, eds. H. W. Turnbull et al. Cambridge: Cambridge University Press, 1959-1977.
- . *Mathematical Principles of Natural Philosophy*, trans. Andrew Motte, revised by Florian Cajori. Berkeley and Los Angeles: University of California Press, 1962.

- *Philosophiae Naturalis Principia Mathematica*, eds. I. Bernard Cohen and Alexander Koyré. Cambridge: Cambridge University Press, 1972; Cambridge, MA: Harvard University Press, 1972.
- *Mathematical Principles of Natural Philosophy*, trans. I. Bernard Cohen. Berkeley et. al.: University of California Press, 1999.
- Niewöhner, Friedrich. "'Primat der Ethik' oder 'erkenntnistheoretische Begründung der Ethik'?" *Thesen zur Kant-Rezeption in der jüdischen Philosophie.* *Wolfenbütteler Studien zur Aufklärung*, IV (1977), 119-161.
- Oldenburg, Henry. *The Correspondence of Henry Oldenburg*, trans. and eds. A. Rupert Hall and Marie Boas Hall, vol. V (1668-1669). Madison: The University of Wisconsin Press, 1968.
- Parkinson, G.H.R. *Logic and Reality in Leibniz's Metaphysics*. Oxford: Clarendon Press, 1965.
- "Philosophy and Logic," in *The Cambridge Companion to Leibniz*, ed. Nicholas Jolley. Cambridge: Cambridge University Press, 1995, 199-223.
- Pemberton, Henry. *A View of Sir Isaac Newton's Philosophy*. London: Palmer, 1728.
- Plaass, Peter. *Kants Theorie der Naturwissenschaft. Eine Untersuchung zur Vorrede von Kants "Metaphysischen Anfangsgründe der Naturwissenschaft"*. Göttingen: Vandenhoeck and Ruprecht, 1965.
- *Kant's Theory of Natural Science*, trans. Alfred E. and Maria G. Miller. Dordrecht et al.: Kluwer Academic, 1994.
- Pocock, J.G.A. *The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition*. Princeton: Princeton University Press, 1975.
- Potok, Herman Harold. *The Rationalism and Skepticism of Solomon Maimon*. PhD. Dissertation. Philadelphia: University of Pennsylvania, 1968.
- Proust, Joëlle. *Questions de Forme. Logique et Proposition Analytique de Kant à Carnap*. Paris: Fayard, 1986.
- Ravitzky, Aviezer. "The Secrets of Maimonides: Between the Thirteenth and the Twentieth Centuries," in *History and Faith: Studies in Jewish Philosophy*. Amsterdam: Gieben, 1996, 246-303.
- Rotenstreich, Nathan. "On the Position of Maimon's Philosophy," *The Review of Metaphysics*, 21 (1968), 534-545.
- Russell, Bertrand. *A Critical Exposition of the Philosophy of Leibniz: With an Appendix of Leading Passages*. Cambridge: Cambridge University Press, 1900, reprinted London: Routledge, 1992.
- *The Principles of Mathematics*, vol. 1 (1903). London: George Allen & Unwin, 1937.
- Scholz, Heinrich, ed. *Die Hauptschriften zum Pantheismusstreit zwischen Jacobi und Mendelssohn*. Berlin: Reuther and Richard, 1916.
- Schulte, Christoph. "Salomon Maimons Lebensgeschichte. Autobiographie und moderne jüdische Identität," in *Sprache und Identität im Judentum*, ed. Karl E. Grözinger, Wiesbaden: Harrassowitz, 1998, 135-149.
- *Die jüdische Aufklärung. Philosophie, Religion, Geschichte*. München: C.H. Beck, 2002.
- Schultz, Johann. Review of *Institutiones Logicae et Metaphysicae* by Johann August Ulrich, in *Allgemeine Literatur Zeitung* (13 December 1785), 297-299, in *Kant's Early Critics: The Empiricist Critique of the Theoretical Philosophy*, trans. Brigitte Sassen. Cambridge: Cambridge University Press, 2000, 210-214.
- Schulz, Günter. "Salomon Maimon und Goethe," *Vierteljahresschrift der Goethe-Gesellschaft*, 16 (1954), 272-288.
- Schwartz, Yossef. "From Negation to Silence: Maimonides' Reception in the Latin West," *Iyyun*, 45 (1996), 389-404. [in Hebrew]

- “Ecce est locus apud me; Maimonides und Eckharts Raumvorstellung als Begriff des Göttlichen,” *Miscellanea Mediaevalia*, 25 (1997), 348-364.
- Secada, Jorge. *Cartesian Metaphysics. The Scholastic Origins of Modern Philosophy*. Cambridge: Cambridge University Press, 2000.
- Sellars, Wilfrid. “Towards a Theory of Predication”, in *How Things Are. Studies in Predication and the History of Philosophy and Science*, eds. James Bogen and James E. McGuire. Dordrecht et al.: D. Reidel, 1985, 285-322.
- Senderowicz, Yaron. “Cartesian Certainty and the Transcendental Deduction,” in *Descartes: Reception and Disenchantment*, eds. Yaron Senderowicz and Y. Wahl. Tel Aviv: University Publishing Projects, 2000, 121-140.
- “Skepticism and the Transcendental Deduction,” *Iyyun*, 51 (2002), 155-179. [in Hebrew]
- Shabel, Lisa. “Kant on the ‘Symbolic Construction’ of Mathematical Concepts,” *Studies in History and Philosophy of Science*, 29 (1998), 589-621.
- Spinoza, Baruch de. *Spinoza’s Ethics and on the Correction of the Understanding*, trans. Andrew Boyle. London: Dent, 1959.
- Stadler, August. *Kants Theorie der Materie*. Leipzig: Hirzel, 1883.
- Stolzenberg, Jürgen. *Fichtes Begriff der intellektuellen Anschauung. Die Entwicklung in den Wissenschaftslehren von 1793/94 bis 1801/02*. Stuttgart: Klett-Cotta, 1986.
- Strawson, Peter F. *The Bounds of Sense: An Essay on Kant’s Critique of Pure Reason*. London: Methuen, 1966.
- *Analysis and Metaphysics: An Introduction to Philosophy*. Oxford: Oxford University Press, 1992.
- *Entity and Identity, and Other Essays*. Oxford: Oxford University Press, 1997.
- Suárez, Francisco. *On the Various Kinds of Distinctions: Disputationes Metaphysicae, Disputatio VII, de variis distinctionum generibus*, trans. Cyril Vollert. Milwaukee: Marquette University Press, 1947.
- Thielke, Peter. “Discursivity and Causality: Maimon’s Challenge to the Second Analogy,” *Kant-Studien*, 92 (2001), 440-463.
- Tilitzki, Christian. *Die deutsche Universitätsphilosophie in der Weimarer Republik und im Dritten Reich*. Berlin: Akademie Verlag, 2002.
- Turnbill, Robert G. “Zeno’s Stricture on Predication in Plato, Aristotle, and Plotinus,” in *How Things Are. Studies in Predication and the History of Philosophy and Science*, eds. James Bogen and James E. McGuire. Dordrecht et al.: D. Reidel, 1985, 21-58.
- Vaihinger, Hans. *Commentar zu Kants Kritik der reinen Vernunft. Erster Band*. Stuttgart: W. Spemann, 1881.
- *Die Philosophie des Als Ob. System der theoretischen, praktischen und religiösen Fiktionen der Menschheit. Auf Grund eines idealistischen Positivismus. Mit einem Anhang über Kant und Nietzsche*. Berlin: Reuther and Reichard, 1911.
- Waibel, Violetta. “Hölderlins frühe Fichte-Kritik und ihre Wirkung auf den Gang der Ausarbeitung der Wissenschaftslehre,” *Revue Internationale de Philosophie*, 50 (1996), 437-460.
- Waxman, Wayne. *Kant’s Model of the Mind: A New Interpretation of Transcendental Idealism*. New York: Oxford University Press, 1991.
- Wells, Norman. “Descartes on Distinction,” in *The Quest for the Absolute*, ed. Frederick J. Adelman. The Hague: Nijhoff, 1966, 104-134.
- Wolff, Christian. *Gesammelte Werke*, eds. Jean École et al. Hildesheim et al.: G. Olms, 1978-.
- Wolff, Michael. *Der Begriff des Widerspruchs: Eine Studie zur Dialektik Kants und Hegels*. Königstein/Ts.: Hain, 1981.

- Wolff, Sabattia Joseph. *Maimoniana. Oder Rhapsodien zur Charakteristik Salomon Maimon's. Aus seinem Privatleben gesammelt von Sabattia Joseph Wolff.* Berlin: G. Hayn, 1813.
- Wolfson, Harry Austryn. *The Philosophy of Spinoza: Unfolding the Latent Processes of His Reasoning*, vol. 1. New York: Schocken, 1969.
- Yakira, Elhanan. "A Principle of Reason or a Theory of Reason," in *Nihil Sine Ratione: Mensch, Natur und Technik um Wirken von G.W. Leibniz. VII Internationaler Leibniz-Kongreß*, ed. Hans Poser. Hannover: Gottfried-Wilhelm-Leibniz-Gesellschaft, 2001.
- "La tolérance entre la *Théodicée* et *Candide*. Le moment leibnizien," in *Qu'est-ce que la tolérance? Perspectives sur Voltaire*, ed. Jürgen Siess. Ferney-Voltaire: Centre International d'Etude du XVIIIe Siècle, 2002, 23-33.
- Zubersky, Albert. *Salomon Maimon und der kritische Idealismus.* Leipzig: F. Meiner, 1925.

THE CONTRIBUTORS

Frederick Beiser

Frederick Charles Beiser is professor at Syracuse University, and author of *The Fate of Reason* (Harvard 1986), *Enlightenment, Revolution & Romanticism* (Harvard 1992), and *German Idealism* (Harvard 2002).

Florian Ehrensperger

Florian Ehrensperger is graduate student at the Ludwig Maximilians Universität of Munich, and is preparing a new critical edition of Maimon's *Versuch über die Transscendentalphilosophie*. He also installed and runs the internet site on Maimon: www.maimon.de

Paul Franks

Paul Franks is assistant professor of philosophy at the University of Notre Dame. He is the author of articles on German Idealism and Wittgenstein, and is the translator, commentator and editor, with Michael L. Morgan, of *Franz Rosenzweig: Philosophical and Theological Essays* (Cambridge and Indianapolis: Hackett, 2000). His book, *All or Nothing: Skepticism, Transcendental Arguments, and Systematicity in German Idealism*, is forthcoming from Harvard University Press.

Gideon Freudenthal

Gideon Freudenthal is professor at the Tel Aviv University, author of *Atom and Individual in the Age of Newton* (Reidel 1986) and co-author of *Exploring the Limits of Pre-Classical Mechanics* (Springer 1992). His papers on Maimon are: "Die Autarkie des Salomon Maimon", in: L. Lambrecht, E-M. Tschurennev (eds.), *Geschichtliche Welt und menschliches Wesen* (Frankfurt/Main and New York: Peter Lang, 1994), pp. 15-35; "Radikale und Kompromißler in der Philosophie: Salomon Maimon über Mendelssohn, den 'philosophischen Heuchler'", in: *Jahrbuch für deutsche Geschichte*, Bd. XXX (2002), pp. 369-385, and "Commentary as a Method of Philosophy", in: *Da'at* (2003; in Hebrew).

Michael Roubach

Michael Roubach is a lecturer in the philosophy department at the Hebrew University in Jerusalem. He published articles on Heidegger, Cassirer and Levinas and he is currently finishing a book on the relation between mathematics and philosophy in Heidegger's thought.

Oded Schechter

Oded Schechter is a graduate student at the Committee on Social Thought, The University of Chicago.

Yossef Schwartz

Yossef Schwartz was until recently (2000-2002) the Martin Buber Professor for Philosophy of Religion in the Johann Wolfgang Goethe University in Frankfurt/Main and is teaching now at the Cohn Institute for the History and Philosophy of Science and Ideas at Tel Aviv University. He is author of *From Cloister to University: Between Theology and Philosophy in the Middle Ages* (Tel Aviv 1999; in Hebrew); "To Thee is silence praise": *Meister Eckhart's reading in Maimonides' Guide of the Perplexed* (Tel Aviv 2002; in Hebrew); Y. Schwartz, Gesine Palmer (eds.), "Innerlich bleibt die Welt eine" *Ausgewählte Texte von Franz Rosenzweig über den Islam* (Berlin 2002).

Yaron Senderowicz

Yaron Senderowicz is lecturer at Tel Aviv University. Among his papers are: M. Dascal, Y. Senderowicz, „How Pure is Pure Reason?“, in: *Histoire, Epistemologie, Langage*, 14/II (1992), pp. 130-152; „Facing the Bounds of Tradition: The Kant - Eberhard Controversy“, in: *Science In Context*, Vol. XI, No. 2, (Summer 1998), pp. 205-228; „Cartesian Certainty and the Transcendental Deduction“, in: Y. Senderowicz, Y. Wahl (eds.), *Descartes: Reception and Disenchantment* (Tel Aviv: University Publishing Company, 2000)

Peter Thielke

Peter Thielke is an assistant professor of philosophy at Pomona College, and the author of "Getting Maimon's Goad: Discursivity, Skepticism and Fichte's Idealism", in: *Journal of the History of Philosophy*, 2001, and "Discursivity and Skepticism: Maimon's Challenge to Kant's Second Analogy", in: *Kant-Studien*, 2002.

Elhanan Yakira

Elhanan Yakira teaches philosophy at the Hebrew University of Jerusalem. Among his publications are: *Nécessité, Contrainte et Choix – la métaphysique de la liberté chez Spinoza et Leibniz* (Zürich 1989), *La causalité de Galilée à Kant* (Paris 1994), E. Grosholz, E. Yakira, *Leibniz's Science of the Rational* (Stuttgart 1998).

INDEX OF NAMES

- Albert, K. 133, 284
 Albertus Magnus 138
 D'Alembert, J. 157
 Allison, H.E. 89, 104, 105, 182, 183,
 227, 231, 284, 288
 Alston, W. 179, 284
 Ameriks, K. 182, , 200, 204, 215,
 225, 231, 284, 286, 287
 Aristotle (Aristotelian) 4, 6, 21, 58,
 60, 68, 74, 86, 132, 153, 289, 291
 Arnauld, A. 59, 61, 68, 284
 Atlas, S. 48, 87, 98, 117, 119, 126,
 131, 141, 200, 213, 284

 Baco[n], F. 6, 150, 174, 248, 264,
 265, 273, 276, 281, 284
 Baumgarten, A.G. 6, 84, 87, 284
 Bayle, P. 56
 Beck, L.W. 216, 284
 Beiser, F. 1, 2, 48, 86, 118, 176, 198,
 200, 216, 233, 244, 248, 284, 293
 Bendavid, L. 234, 270, 287
 Bensussan, J. 287
 Bergmann, S.H. 126, 227
 Bernoulli, D. 166, 285
 Blumenbach, J.F. 11
 Bogen, J. 58, 285, 291
 Bolzano, B. 163, 285
 Bransen, J. 16, 20, 41, 141, 144,
 148, 191, 193, 194, 195, 198, 285
 Breazeale, D. 238, 285, 286
 Bruckstein, A. 143, 285
 Bruno, G. 11, 139, 142, 268, 276
 Buchdahl, G. 227, 231, 285
 Buxtorf, J. 128
 Buzaglo, M. 31, 87, 135, 137, 142,
 200, 285

 Cassirer, E. 54, 72, 117, 146, 176,
 200, 213, 238, 285
 Chisholm, R. 180, 285
 Clarke, S. 203, 289
 Cohen, H. 4, 7, 117, 143, 151, 204,
 285
 Cohen, I.B. 290

 Damerow, P. 153, 285
 Deleuze, G. 86, 88, 285
 Descartes, R. 13, 55, 56, 59, 60, 173,
 206, 207, 236, 285, 288, 291, 294

 Eckartshausen, K. von 249, 250,
 253, 285
 Eckhart, Meister 138, 284, 291, 294
 Engstler, A. 1, 12, 114, 122, 137,
 141, 148, 150, 200, 201, 213, 285
 Engstrom, S. 182, 216, 286
 Erdmann, J.E. 176, 200, 286
 Euchel, I. 128, 263, 281
 Euler, L. 145, 146, 150, 286

 Fichte, J.G. 1, 3, 5, 19, 52, 53, 117,
 233, 234, 235, 238-244, 246-248,
 270, 272, 278, 283, 284, 285, 286,
 288, 289, 291, 294
 Forsyth, T.M. 133, 286
 Franks, P. 48, 144, 177, 200, 202,
 211, 225, 286, 293
 Freudenthal, G. 1, 3, 6, 18, 40, 48,
 144, 146, 177, 200, 214, 223, 228,
 248, 249, 250, 286, 293
 Friedman, M. 103, 148, 200, 217,
 227, 228, 231, 232, 286, 288
 Fromer, J. 11, 286

 Galileo, G. 56, 15, 285
 Gettier, E. 181, 287
 Gilson, E. 207, 287
 Glockner, H. 4, 287
 Goethe, J.W. 2, 14, 270, 271, 272,
 290, 294
 Grajewski, M. 208, 287
 Granger, G.G. 59, 287
 Grosholz, E. 55, 65, 287, 294
 Grözinger, K.E. 290
 Grün, K.J. 139, 287
 Guyer, P. 182, 202, 216, 225, 284,
 286, 287, 288

 Harvey, W.Z. 125, 126, 287
 Hayoun, M.-R. 126, 128, 136, 287

- Hegel, G.W.F. 1, 5, 17, 47, 51, 52, 53, 86, 88, 287, 288, 291
- Heidegger, M. 182, 204, 210, 287, 293
- Henrich, D. 204, 210, 287
- Hoffmeister, J. 213, 287
- Hölderlin, F. 244, 291
- Hume, D. 6, 9, 10, 12, 15, 54, 78, 79, 99, 142, 148, 176, 177, 182, 185, 186, 187, 193, 195, 197, 215, 217, 221, 222, 223, 225, 226, 233, 237, 242, 253, 284, 287
- Husserl, E. 75
- Ibn Gabirol 139
- Ishiguro, H. 287
- Jacobi, F.H. 139, 141, 272, 278, 286, 288, 290
- Jakob, L.H. von 249, 250, 260, 261, 288
- Kabitz, W. 244, 288
- Kalkreuth, A. Graf von 3
- Kambouchner, D. 56, 288
- Kant, I. (Kantianism, Kantians, Neo-Kantianism, Neo-Kantians, Post-Kantians) 1, 3, 4-7, 9, 11-15, 17, 19, 31, 35-40, 42, 47, 52-55, 58-68, 72-84, 86, 88-100, 102-114, 116-122, 124-128, 135-137, 140, 142-153, 155-170, 172, 174-180, 182-198, 200-212, 215-239, 241, 245-246, 248, 253, 254, 259-260, 265, 267, 269, 270-273, 275, 277-278, 280, 283-291, 294
- Kashap, S.P. 286
- Kästner, A.G. 158
- Katzoff, C. 288
- Kiesewetter, J.G.C.C. 6
- Klapp, E. 1, 288
- Knobloch, W. 174
- Körner, S. 231, 288
- Koyré, A. 290
- Kripke, S. 179, 288
- Kroner, R. 1, 17, 201, 288
- Kuntze, F. 4, 5, 7, 18, 27, 31, 119, 176, 200, 213, 288
- Lachterman, D.R. 45, 126, 289
- Lask, E. 201, 289
- Lehmann, G. 2, 4, 5, 7, 12, 13, 200, 289
- Leibniz, G.W. 4, 5, 6, 9, 10, 11, 12, 19, 20, 31-35, 37, 39, 41, 42, 47, 54-61, 63-70, 72-80, 82, 90, 92, 96, 98, 104, 105, 107, 108, 114, 118, 127, 128, 135, 137, 142, 145, 173, 184, 203-206, 207, 208, 236, 259, 261, 262, 264, 282, 285, 287, 289, 290, 292, 294
- Levy, Z. 127, 289
- Locke, J. 4, 11, 101, 186, 221, 253
- Longuenesse, B. 84, 109, 211, 217, 289
- Mach, E. 170, 171, 289
- Maimonides, M. (Maimonideanism) 3, 4, 6, 7, 9, 11, 13, 14, 125-138, 140, 142, 143, 150, 172, 206, 218, 219, 260, 264, 284, 287, 289, 290, 291, 294
- Malebranche, N. 78
- Martin, W. 238, 239, 289
- McDowell, J. 111, 119, 204, 208, 212, 289
- McGuire, J. 58, 285, 291
- Mendelssohn, M. 3, 4, 7, 11, 125, 127, 134, 136, 140, 141, 142, 286, 288, 289, 290, 293
- Moritz, K.P. 3, 4, 263, 266, 267, 271, 273, 275, 278, 282, 289
- Motte, A. 151, 152, 289
- Narboni, M. 6, 128,
- Natorp, P. 117
- Neile, W. 153, 154, 155, 158, 166
- Newton, I. (Newtonians) 6, 91, 96, 116, 146, 148, 151, 152, 153, 164, 165, 173, 174, 203, 204, 222, 223, 225, 229, 264,
- Nicole, P. 59, 61, 68, 284
- Niewöhner, F. 13, 290
- Oldenburg, H. 154, 290
- Pemberton, H. 6, 145, 164, 166, 172, 173, 174, 282, 290
- Pines, S. 289
- Plaas, P. 149, 290
- Pocock, J.G.A. 55, 290,
- Potok, H.H. 20, 48, 290
- Poser, H. 292
- Proust, J. 61, 290
- Pythagoras 251

- Rashi (r' Shlomo Yitzhaki) 16
 Ravitzky, A. 130, 290
 Reinhold, K.L. 2, 6, 11, 19, 53, 233,
 234, 244, 272, 278, 286
 Rotenstreich, N. 48, 281, 290
 Russell, B. 34, 153, 154, 155, 156,
 158, 290

 Schechter, O. 18, 174, 211, 293
 Schelling, F.W.J. 1, 5, 52
 Schulte, C. 3, 126, 128, 290
 Schultz, J. 216, 217, 218, 225, 290
 Schulz, G. 2, 270, 271, 272, 278,
 285, 290
 Schulze, G.E. 234, 238, 239, 244
 Scotus, D. 208, 287
 Secada, J. 207, 291
 Sellars, W. 59, 291
 Senderowicz, A. 176, 182, 195, 201,
 211, 291, 294
 Shabel, L. 103, 291
 Siess, J. 292
 Spinoza, B. (Spinozism) 9, 10, 11,
 12, 54, 55, 56, 114, 133, 134, 137,
 138, 139, 140, 141, 142, 208, 236,
 286, 288, 289, 291, 292, 294

 Stadler, A. 146, 161, 291
 Strawson, P.F. 182, 204, 210, 215,
 231, 291
 Suarez, F. 207, 208

 Tilitzki, C. 4, 291
 Thomas Aquinas 7, 8, 284
 Turnbull, R.G. 58, 291

 Vaihinger, H. 7, 166, 192

 Wachter, J.G. 141
 Waibel, V. 244, 291
 Waxman, W. 109, 291
 Wells, N. 207, 291
 Wilkins, J. [Bischoff Willkens] 259,
 260, 262
 Wolff, C. 260, 291
 Wolff, M. 163, 208, 291
 Wolff, S.J. 3, 6, 12, 205, 206, 249,
 250, 262, 269, 270, 280, 292
 Wolfson, H.A. 133, 137, 292

 Yehuda Halevi 7

 Zubersky, A. 200, 292

INDEX OF SUBJECTS

- abstraction 7, 136
affection 93, 99, 110, 111, 113, 114,
116, 191, 122, 123, 124, 210
causal account of a. 122, 123
algebra 45, 150, 252
analogy 8, 113, 120, 131, 138, 153,
201
second a. 226, 227, 291, 294
analysis 27, 33, 34, 57, 61, 65, 66,
68, 70, 76, 79, 84, 85, 88, 90, 126,
127, 133, 135, 137, 138, 140, 142,
143, 154, 176, 219, 220, 223, 230,
240
analytic 20, 31, 35, 36, 37, 38,
42, 45, 65, 66, 68, 74, 81, 86, 103,
136, 145, 146, 148, 149, 153, 168,
182, 195, 196, 197
analytic and synthetic 31, 35, 39,
182, 183
analytic judgment 35, 36, 37, 38,
46, 68
antinomy 141, 154, 224, 225, 244,
245, 246, 247
of thought 191, 244
apodeictic (knowledge)—see also
certainty 144, 145, 146, 149, 150,
155, 158, 170, 174, 175, 180, 184
apperception 52, 61, 76, 136, 225
a priori 16, 26, 36, 91, 101, 108,
113, 120, 136, 146, 147, 148, 150,
158, 160, 170, 171, 173, 179, 198,
212, 220, 221, 224, 226, 228, 237,
240, 260
concepts 45, 69, 93, 94, 103,
116, 149, 166, 173, 184, 185, 186,
190, 193, 194, 198, 201, 203, 206,
222, 228, 235, 236, 239
"fact" of synthetic a. knowledge
186
judgment 35, 43, 45, 63, 144,
145, 146, 147, 148, 149, 178, 179,
180, 181, 182, 185, 194, 246
knowledge 91, 146, 158, 159,
172, 175, 178, 179, 180, 182, 184,
186, 187, 188, 191, 192, 193, 194,
195, 198, 221, 225
objects 26, 31, 45, 91, 96, 101,
103, 191, 193, 194
synthetic a. principles 46, 52,
182, 183, 190
skepticism about a. knowledge
182, 183, 187
arithmetic 103, 152, 153
Bible 5
calculus 32, 57, 115, 155, 161,
213
categories 35, 36, 83, 118, 149, 151,
159, 182, 184, 185, 186, 189-194,
196, 197, 206, 211, 216-222, 225,
226, 236-240
causality 36, 132, 133, 135, 137,
140, 148, 154, 158, 162, 163, 184,
217, 219, 221, 222, 224, 226, 227,
229, 236, 237
complex c. 154
characteristica universalis 252, 259,
262
certainty—see also apodeictic
(knowledge) 145, 146, 149, 150,
155, 174, 179, 184, 222, 228
cognition 26, 32, 50, 82, 89, 91-94,
97, 99, 101, 102, 103, 107-110,
112, 113, 114, 116, 117, 118, 119,
120-124, 132, 133, 135-140, 193,
206, 213, 221
commentary 3, 6, 7, 8, 10, 11, 12,
13, 25, 74, 128, 129, 130, 131,
134, 138, 143, 150, 164, 169, 172,
206, 207, 219
commentator 7, 8, 20, 31, 89,
128, 215, 293
super-commentary 6, 11, 164
compound 151, 152, 153, 154
force 151-155, 160, 161, 164-
167, 172, 173
motion 146, 151, 152, 154, 155,
156, 159, 160, 164-167, 172
mechanical construction of c.
motion 157, 158
completion 50, 102, 114

- comprehension (intension) 57, 61, 68, 79
- concept
 a priori c. 45, 69, 93, 94, 103, 116, 149, 166, 173, 184, 185, 186, 190, 193, 194, 198, 201, 203, 206, 222, 228, 235, 236, 239
 intellectual c.s 184, 188, 189
- condition 20, 23, 25, 26, 28, 42, 43, 44, 47, 50, 51, 53, 56, 59, 61, 62, 67, 71, 74, 75, 78, 79, 83, 85, 91, 94, 95, 96, 97, 98, 100, 101, 102, 106, 112, 115, 116, 129, 138, 147, 175, 177, 179, 181, 184, 185, 189, 190, 205, 206, 207, 212, 219, 228, 238, 240, 243, 245, 247
 of possibility 59, 65, 71, 79
- consciousness 5, 50, 65, 69, 71, 72, 73, 96, 97, 100, 101, 111, 112, 113, 114, 116, 118, 119, 123, 167, 180, 188, 190, 191, 193, 195, 196
 objective c. 97
 object of c. 193, 195, 196
 subjective c.
- construction—see also compound
 24, 37, 38, 39, 43-48, 51, 52, 56, 67, 103, 108, 144, 155, 156, 158, 162, 165, 166, 167, 172, 195, 217, 227
- creatio ex nihilo 45, 140, 141
- criterion 31, 35, 51, 70, 79, 120, 178, 180, 201, 236, 237, 240
 for applying synthetic a priori concepts 35
- criticism 2, 3, 20, 35, 46, 54, 55, 61, 72, 79, 94, 124, 136, 148, 177, 184, 198, 201
- deciphering 10
- deduction 43, 47, 48, 69, 141, 146, 184, 185, 209, 218
 empirical d. 185, 221
 metaphysical d. 209, 211
 transcendental d. 35, 182, 184, 243
- dependence 10, 20, 21, 23, 25, 26, 45, 72, 132, 147, 149
 and independence 71
- determinability 18, 69, 83, 191, 195, 210
 principle of d. 41, 42, 76, 83, 103, 190, 195, 196, 197
 law of d. 18-53 *passim*
- determination 20, 26, 28, 29, 30, 38, 39, 40, 41, 44, 49, 52, 57, 61, 62, 63, 64, 66, 67, 68, 70-79, 83, 85, 87, 88, 100, 103, 107, 108, 115, 118, 151, 154, 168, 191, 196, 210, 214, 224, 240, 242
- difference 15, 21, 23, 24, 32, 43, 45, 46, 55, 61, 64, 66, 69, 70, 76, 80-85, 87, 88, 94-101, 104, 106-111, 115, 117, 119, 121, 124, 128, 130, 131, 133, 135, 140, 146, 150, 153, 164, 168, 172, 174, 178, 181, 182, 184, 192, 193, 195, 197, 198, 207, 210, 213, 219, 220, 221, 222, 238, 243, 247
 schema of d. 97
- differential 80, 86, 87, 88, 110, 111, 114, 116, 117, 118, 119, 120, 121, 122, 124
- discursivity thesis 89, 90, 109
- distinction 5, 7, 20, 21, 26, 27, 31, 43, 58, 61, 65, 66, 67, 68, 70, 71, 72, 75, 81, 82, 83, 85, 86, 87, 88, 97, 98, 110, 112, 121, 149, 156, 168, 179, 180, 183, 188, 190, 191, 192, 195, 197, 198, 204, 206, 207, 208, 210, 214, 216, 217
 formal d. 206, 207, 208
 modal d. 207, 208, 209, 212
 rational d. 207, 208, 212
 real d. 85, 87, 206, 207, 208, 209, 210, 212
- diversity 75, 90, 94, 95, 96, 97, 121
 form of d. 90, 93, 96, 99, 109, 119
- divine 9, 15, 66, 78, 131, 132, 133, 136, 137, 138, 139, 141, 203, 247
 causation 133, 138
 immanence 137
 transcendence 137
- dogmatism 10, 15, 18, 40, 51, 144, 150, 183, 200, 201, 205, 215
 dogmatic 10, 15, 61, 144, 182, 183, 184, 190, 200, 204, 214, 241
- dualism 79, 110, 117, 118, 124, 137, 198, 202, 205, 212, 223, 224, 230, 235, 236, 239, 245, 246, 248
 of understanding and sensibility 235, 245, 246, 247
- dynamics 56, 57, 153, 157, 166
- enlightenment 14, 125, 127, 128, 129, 130, 288

- enthusiasm (Schwärmerei) 259,
 261, 268, 276
 epistemology 142, 197, 198, 248
 non-skeptical e. 197
 esoteric 14, 15, 129, 130
 philosophy 15
 esotericism 129
 experience 5, 34, 35, 43, 54, 89, 90,
 94, 103, 104, 112, 113, 116, 118,
 120, 146, 147, 148, 149, 171, 173-
 180, 182, 184, 186, 187, 190, 191,
 195, 197, 205, 208, 211, 212, 215-
 220, 223, 225-230, 235-246
 judgments of e. 177, 180, 216,
 217, 218, 219, 225, 226, 229, 230
 objective e. 148, 177
 object of e. 54, 106, 190, 197,
 205, 242, 243
 extension 61, 68, 91, 105, 134, 158,
 172, 207

 "fact" of synthetic a priori know-
 ledge 186
 Faktum Wissenschaft ("fact of sci-
 ence")—see "fact" of synthetic a
 priori knowledge 147, 148, 155
 fiction 99, 100, 101, 166, 220
 force—see also compound, construc-
 tion 54, 57, 81, 91, 95, 98, 144,
 145, 151-156, 158-166, 169-173,
 178, 228
 form
 of diversity 90, 93, 96, 109, 119
 of intuition 80, 82, 83, 84, 90-94,
 96, 98, 106-110, 113, 114, 116,
 118, 123, 147, 151, 183, 184, 185,
 188, 189, 192, 193, 194, 202, 209,
 238
 formality
 distinction 206, 207, 208
 thought—see also real thought
 5, 16, 17

 generality 21, 59, 67, 69, 70, 147
 geometry 25, 44, 45, 46, 102, 103,
 108, 144, 161, 172, 174, 176, 203,
 214
 German Idealism 16, 19, 47, 48, 51,
 284, 286, 287, 293
Guide of the Perplexed—see
 Maimonides
 ha-Measef 264

 harmony 57, 159, 218
 pre-established h. 10, 57, 218
 haskalah 128
 heterogeneity 90, 94, 163
 homogeneity 94

 idea 10, 22-28, 30, 31, 32, 39-45,
 47-49, 52, 55, 56, 59-64, 69, 71,
 72, 79, 83, 95, 99, 110, 113, 114,
 115, 118, 119, 121, 122, 134, 166,
 177, 183, 184, 202, 204, 211, 212,
 224, 227, 237, 245
 i.s of reason [Vernunftideen]
 117, 118, 121
 ideal 7, 14, 39, 41, 49, 57, 76, 78,
 82, 126, 127, 128, 130, 143, 144,
 174, 213, 245, 246, 247
 transcendental i. 82, 91, 121,
 200, 201, 234, 241
 idealism 89, 93, 121, 135, 201, 234,
 241
 German I. 199, 234
 image 61, 94, 97, 98, 99, 101,
 105, 106, 107, 110, 113, 118
 imagination 24, 32, 36, 50, 98, 99,
 103, 106, 107, 110, 111, 116, 118,
 122, 177, 190, 193, 209, 234, 239,
 240, 241, 242, 243
 ens imaginarium 81, 98
 inclusion 32, 34, 35, 39, 51, 68
 principle of i. 32, 34, 39, 51
 incongruent counterparts 104, 107,
 108, 109
 independence 2, 71, 166, 212, 246,
 247
 and dependence 71
 inesse 32, 58, 59, 60, 68, 74, 75
 infinite 15, 20, 34, 44, 49, 85, 88,
 105, 106, 112, 114, 131, 140, 169,
 202, 203, 204, 205, 207, 210, 211,
 212, 214, 218, 219, 223, 224, 229,
 230, 240, 242, 247
 intellect 15, 16, 20, 34, 39, 43,
 45, 48, 49, 50, 52, 66, 80, 86, 87,
 88, 114, 131, 139, 205, 207, 208,
 211, 212, 213, 214
 striving 240, 243, 247
 understanding 114, 175, 210,
 213, 245, 247
 infinitesimal 57, 115, 166, 213
 intellect 27, 32, 37, 42, 43, 45, 46,
 47, 49, 51, 66, 87, 131, 133, 134,
 136, 139, 206, 207, 208

- infinite i. 15, 16, 20, 34, 39, 43,
 45, 48, 49, 50, 52, 66, 80, 86, 87,
 88, 114, 131, 139, 205, 207, 208,
 211, 212, 213, 214
 intelligibility 57, 78, 136, 178, 202-
 207, 209, 211, 212, 213, 214, 218,
 219, 222, 223, 224, 229, 230
 intention 13, 19, 48, 71, 72, 74, 177,
 182, 190, 217, 246
 intentionality
 intentional object 191
 intuition 20, 24, 36, 37, 38, 45, 46,
 48, 50, 52, 80-85, 90-98, 100, 103-
 110, 113, 114, 116, 117, 118, 121,
 123, 138, 147, 149, 150, 151, 156,
 159, 170, 183-186, 188-194, 196,
 202, 209, 214, 235-239, 241, 243
 pure form of i. 37, 45, 46, 91,
 92, 96, 103, 155
 role of i. in synthetic judgments
 39, 145, 183
 judgment
 analytic j. 31, 35, 36, 37, 38, 39,
 46, 68, 182, 183, 195
 a priori j. 43, 45, 63, 146, 178,
 179, 180, 181, 182, 183, 185, 190,
 246
 objective j. 177, 215
 of experience 217
 of perception 217
 ordinary practices of j.s 202,
 214, 231, 232
 scientific practices of j.s 231
 synthetic j. 20, 31, 35, 36, 38, 39,
 45, 46, 52, 144, 145, 147, 148,
 177, 183, 184, 195, 196, 197
 synthetic a priori j. 45, 63, 146,
 182, 183, 185, 190, 246
 kabbalah 4
 Kalam (Mutakallimun) 132, 133,
 140
 kinematics 153
 knowledge 4, 5, 10, 13, 15, 16, 18,
 19, 33, 34-41, 44, 45, 48, 50, 56,
 65, 75, 77, 78, 101, 102, 103, 106,
 109, 120, 130, 135, 137, 141, 142,
 146, 148, 149, 151, 158, 159, 166,
 173-180, 182, 184-188, 191, 192,
 194, 198, 204, 205, 212, 215, 220,
 221, 222, 225, 226, 230, 234, 235,
 238, 242-248
 a priori k. 91, 146, 158, 159,
 172, 175, 178, 179, 180, 182, 184,
 186, 187, 188, 191, 192, 193, 194,
 195, 198, 221, 225
Kuzari—see Yehuda Halevi
 law—see also principle; see also
 determinability 18, 19, 22, 23,
 30, 31, 36, 37, 39, 52, 53, 56, 75,
 76, 82, 83, 116, 145, 146, 148,
 151, 152, 154, 171, 173, 174, 175,
 191, 195, 203, 213, 218, 219, 228,
 236, 245, 246
 of determinability 18, 191, 195
 limitation 4, 13, 108, 112
 logic 6, 16, 18, 28, 30, 31, 32, 39,
 40, 41, 45, 47, 60, 65, 68, 76, 79,
 80, 81, 82, 84, 86, 88, 144, 160,
 198, 287, 290
 general l. 36, 82, 83
 transcendental l. 16, 18, 23, 24,
 28, 30, 31, 32, 39, 41, 60, 76, 81,
 82, 88
 manifold 36, 61, 96, 97, 100, 111,
 112, 116, 117, 118, 119, 173, 188,
 201, 209, 225
 manner
 of origin [Entstehungsart] 115,
 123, 253, 255
 mathematics 3, 15, 43, 44, 45, 47,
 56, 87, 102, 103, 108, 115, 144,
 145, 147, 149, 150, 163, 174, 182,
 186, 201, 212, 214, 219, 221, 224,
 229, 230, 293
 modal 179
 distinction 207, 208, 209, 212
 monism 141, 212, 213, 223
 motion—see also compound 116,
 139, 144, 145, 146, 151-161, 165-
 170, 172, 203, 228
 Mutakallimun (Kalam) 132, 133,
 140
 necessity 1, 15, 16, 25, 33, 34, 94,
 103, 130, 150, 153, 155, 165, 177,
 178, 179, 180, 181, 182, 184, 185,
 186, 187, 193, 194, 195, 218, 219,
 220, 222, 224, 225, 226, 227, 288
 objective n. 193, 194
 subjective n. 185, 186, 193, 194,
 214
 nihil 48, 81, 164, 292

- negativum 81, 164
 privativum 81, 164
 nominalism 66
- object
 act of apprehension and its o.
 188
 of an appearance 108, 114, 146,
 185, 187, 188, 190, 193, 197, 202,
 210, 211, 216, 217, 218, 228, 246
 of consciousness 65, 69, 71, 72,
 96, 100, 101, 111, 113, 188, 190,
 193, 195, 196, 240
 of experience 35, 94, 182, 215,
 216, 217, 239
 determined outside thought
 190
 determined by thought 188,
 191, 192, 194
 intentional o. 191
 non-sensible o. 184, 188
 real o. 22, 39, 41, 42, 45, 65, 70,
 72, 99, 116, 190, 191, 193, 198
 real thought o. 191, 192
 thought o. 101, 191, 192
 objective 45, 57, 65, 71, 72, 77, 97,
 98, 99, 102, 106, 107, 119, 123,
 124, 135, 147, 214, 215, 222, 227
 consciousness
 experience 148, 177
 judgment 177, 215
 necessity 193, 194
 opposition 13, 23, 24, 55, 59, 61,
 78, 81, 82, 83, 84, 85, 86, 88, 118,
 159, 160, 162, 163, 164, 167, 168,
 168, 170, 172
 empirical o. 170
 logical o. 81, 82, 83, 84, 85, 88,
 167
 real o. 80, 81, 82, 85, 144, 158,
 162, 164, 167, 168, 172
 transcendental o. 85
- pantheism 133, 134, 139
 Pantheismusstreit 134, 138, 139,
 140, 141, 290
 parallelogram rule—see also
 compound 152, 153, 155, 165,
 166, 171, 172, 173
 particular 2, 8, 20, 21, 22, 27, 28,
 59, 66, 67, 70, 73, 76, 92, 96, 97,
 98, 101, 104, 105, 106, 107, 108,
 113, 115, 117, 118, 130, 132, 138,
 139, 154, 173, 217, 218, 235, 239,
 244
 passivity 112, 113, 114, 123, 124,
 213
 perception 93, 99, 110, 111, 116,
 117, 118, 119, 121, 122, 123, 135,
 136, 186, 216, 217, 225, 226, 227,
 228
 judgments of p. 216, 217, 228
 perfection (shlemut) 15, 244
Phaedon—see Mendelssohn
 phenomenon 13, 93, 151, 219, 222
philosophia perennis 10, 11, 12
 philosophy
 esoteric p. 14, 15
 speculative p. 18, 19, 40, 47, 48,
 51, 52
 phoronomy 146, 155, 160
 possibility 18, 19, 20, 25, 26, 28, 31,
 42-47, 49, 50, 53, 59, 69, 71, 77,
 79, 84, 88, 91, 93-98, 100, 101,
 106, 112, 118, 120, 125, 128, 130,
 147, 148, 155, 159, 169, 173, 175,
 176, 177, 181, 182, 185, 188-192,
 203, 206, 207, 211, 212, 219, 221,
 223, 226, 227, 229, 231, 232, 238,
 245, 247
 condition of p. 59, 71, 79
 real p. 188
 predicate 19-29, 32-35, 38-44, 60,
 62, 63, 64, 65, 67, 69-75, 80, 83,
 85, 87, 88, 101, 102, 108, 144,
 164, 167, 168, 169, 183, 195, 196
 and subject 19-29, 32-35, 38-44,
 60, 62, 63, 64, 65, 67, 69-75, 80,
 83, 85, 87, 88, 101, 102, 108, 144,
 164, 169, 183, 195, 196
 predication 22, 32, 54, 57-75, 77,
 78, 79, 87, 164, 168, 188, 285,
 291
 presentation 8, 12, 13, 14, 18, 37,
 43, 45, 46, 47, 50, 102, 110, 111,
 147, 153, 185
 principle—see also law
 of determinability 18, 19, 41, 42,
 76, 83, 103, 120, 168, 175, 190,
 191, 195, 196, 197, 211, 289
 of inclusion 32, 34, 39, 51
 of reason 56, 57, 60, 76, 77, 78,
 292
 synthetic a priori p.s 46, 52, 182,
 183, 190

- production 4, 25, 45, 47, 103, 117-121, 133
- quid facti? 15, 48, 147, 148, 149, 173, 175-178, 186, 189, 190, 191, 192, 197, 198, 206, 215, 216, 219, 221, 222, 224, 226, 230, 243
- quid juris? 48, 142, 149, 173, 175, 193, 194, 205, 206, 213, 214, 230
- rational 15, 40, 51, 73, 74, 75, 77, 79, 117, 139, 144, 150, 173, 174, 200, 201, 204, 205, 207, 208, 209, 210, 211, 212, 214, 215, 218, 224, 230, 245, 247, 248, 294
distinction 207, 208, 212
- rationalism 2, 51, 54, 57, 104, 106, 135, 217, 285, 290
rationalist 90, 91, 125, 143, 174, 175, 214, 218, 223, 230
- real
distinction 85, 87, 206, 207, 208, 209, 210, 212
object 22, 39, 41, 42, 45, 65, 70, 72, 99, 116, 190, 191, 193, 198
thought object 191, 192
opposition 80, 81, 82, 85, 144, 158, 162, 164, 167, 168, 172
possibility 188
thought—see also formal
thought 19, 24, 30, 42, 76, 85, 86, 87, 191, 192, 195, 196, 197, 201
- realism 106, 119, 234, 238, 239
- reason
principle of r. 56, 60, 76, 77, 292
- receptivity 107, 109, 111, 114, 119, 139
- reduction thesis 19, 27, 28, 30, 31, 40
- representation 36, 37, 41, 42, 43, 44, 45, 47, 61, 63, 67, 91, 92, 93, 94, 95, 97, 98, 99, 100, 101, 103-108, 111-116, 119, 122, 123, 166, 183, 184, 186, 188, 189, 190, 192, 201, 227, 238, 241, 242
- review 217, 158, 290
- Rosenthalertor 129
- schema 52, 97, 237, 238
of difference 97
- schematism 147, 237
- Schwärmerei (enthusiasm) 259, 261, 268, 276
- Selbstdenker 14, 15
- sensation 91, 95, 96, 100, 110, 111, 113, 115-118, 122, 123, 149, 186, 213, 240, 242, 244
- sensible representations 116, 184
- sensibility 82, 83, 86, 89-92, 96, 98, 100, 101, 102, 110, 116, 117, 122, 123, 185, 189, 202, 204, 206-210, 212, 213, 235, 236, 242, 246, 247, 289
form of s. 96, 210, 213, 242
- separateness 96, 101
- shem hamphorash (tetragrammaton) 137, 138
- shlemut (perfection) 15, 244
- skepticism 2, 10, 15, 18, 19, 40, 44, 47, 48, 51, 78, 79, 106, 135, 144, 150, 173-176, 178, 182, 183, 185, 187, 188, 193, 196, 198-201, 205, 212, 214, 215, 219, 220, 221, 222, 224, 225, 229-235, 238, 239, 242-248, 285, 286, 290, 291, 293, 294
- skeptics 147, 216, 233
about a priori knowledge 182, 183, 187
about transcendental deduction 235, 238, 243
about schematism 237
about transcendental psychology 241, 243
- space 8, 32, 42, 71, 80, 84, 89-110, 113, 114, 119, 121, 123, 124, 146, 155-160, 162, 165, 170, 180, 185, 186, 204, 209, 210, 215, 235, 236
- statics 153, 166, 171
- striving 240, 242, 247
infinite s. 240, 243, 247
- subject 19-29, 32-35, 38-44, 60, 62, 63, 64, 65, 67, 69-75, 80, 83, 85, 87, 88, 101, 102, 108, 144, 164, 169, 183, 195, 196
and predicate 19-29, 32-35, 38-44, 60, 62, 63, 64, 65, 67, 69-75, 80, 83, 85, 87, 88, 101, 102, 108, 144, 164, 167, 168, 169, 183, 195, 196
- subjective 45, 91, 97, 98, 106, 107, 150, 185, 186, 193, 194, 214, 222, 226, 227, 253
consciousness 97
necessity 185, 186, 193, 194, 214

Summa Theologiae—see Thomas

Aquinas

synthesis 18-32, 35-45, 47-52, 54, 56,
60, 61, 64, 65, 66, 68, 69, 70, 71,
74, 75, 77, 109, 111, 112, 116,
120, 122, 123, 138, 154, 190, 198,
209, 212, 220, 221, 223, 239, 242

synthetic

synthetic judgments 20, 31, 35,
36, 38, 39, 45, 46, 52, 144, 145,
147, 148, 177, 183, 184, 195, 196,
197

synthetic a priori judgments 45,
63, 146, 182, 183, 185, 190, 246

synthetic a priori principles 46,
52, 182, 183, 190

System

“System of coalition”

(“Coalitionssystem”) 6, 9, 11, 12

Talmud 4, 5, 14

Talmudist 4

tetragrammaton (shem hampho-
rash) 137, 138

thing-in-itself 43, 63, 72, 74, 191,
198, 238, 239

thought

antinomy of t. 191, 244, 285

object 101, 191, 192

real and formal t. 85

time 11, 15, 18, 25, 27, 32, 42, 45,
49, 52, 53, 55, 58, 72, 75, 79, 80,
81, 84, 89-126, 128, 129, 130, 133,
134, 140, 141, 142, 146, 153, 154,
155, 157, 166, 169, 173, 174, 185,
186, 190, 193, 194, 198, 203, 204,
209, 210, 212, 227, 228, 235, 236,
237, 246

transcendental

deduction 35, 182, 184, 243

dualism 198

logic 16, 18, 23, 24, 28, 30, 31,
32, 39, 41, 60, 76, 81, 82, 88

opposition 85

philosophy 57, 63, 74, 77, 80,
84, 86, 90, 144, 149, 159, 176,
183, 205, 206, 228, 231, 232

truth 12, 14, 29, 30, 31, 32, 33, 34,
40, 50, 72, 74, 75, 76, 77, 78, 82,
129, 132, 147, 153, 155, 161, 166,
172, 175, 179, 181, 182, 185, 238,
240, 246

tsimtsum

understanding 2, 4, 8, 11, 14, 18,

19, 23, 25, 32, 33, 35, 36, 37, 40,

42, 43, 45, 46, 47, 50, 60, 61, 62,

64, 65, 74, 76, 78, 80, 83, 86, 88,

89, 91, 93, 95, 98-103, 108-112,

114, 116-124, 130, 134, 135, 143,

146, 147, 148, 159, 173, 175, 182,

185, 186, 189, 190, 192, 197, 201-

213, 215, 216, 218, 220, 221, 222,

224, 234, 235, 236, 237, 239,

242-247, 289, 291

infinite u. 114, 175, 210, 213,

245, 247

universal 15, 57, 58, 59, 61, 66, 67,

70, 92, 102, 130, 139, 149, 173,

177, 216-223, 228, 231, 235, 237,

242, 244

universality 15, 16, 52, 93, 94, 178,

179, 180, 218, 220, 221, 222, 225,

226

Wissenschaftslehre—see Fichte

