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Bibliography (1975-1995)

1. Tonelli, Giorgio, 1975. "The Problem of the Classification of the Sciences in Kant's Time." Rivista Critica di Storia della Filosofia no. 30:243-294. "In order to understand the meaning and the originality of Kant's classification of the parts of philosophy in the Critique of Pure Reason, and the status of the Critique itself within Kant's system, it is necessary to survey briefly the history of this problem, at least in the years immediately preceding the formation of Kant's doctrines. It would be impossible here to inquire farther back into the history of this question, which would require not one but several volumes in order to be adequately expounded. So that I shall begin a detailed examination of the developments of this problem after the well known classification of the *Encyclopédie*, prefixing only a few precedents indispensable for understanding the further course of the dispute. As the history of this problem is only one of the prerequisites needed for understanding Kant's classification, and the status of the first *Critique*, I shall refrain on this occasion from drawing conclusions in connection with Kant. The problem of the classification of the parts of philosophy is frequently conceived as an aspect of the more general question of the classification of the sciences at large: therefore I shall have in many cases to enlarge accordingly the field of my inquiry." (p. 243) [The works discussed are: § 1. Christian Wolff (1679-1754), Philosophia rationalis sive Logica, Francofurti et Lipsiae 1728. (The basic discussion is to be found in the *Discursus praeliminaris de* philosophia in genere preceding the work). § 2. Samuel Christian Hollmann (1696-1787), Dissertatio philosophica de vera Philosophiae Notione: ... pars prior, Vitebergae 1731; ... pars posterior, Vitebergae 1733; Dissertatio philosophica de definiendis justis scientiarum philosophicarum limitibus prior. Gottingae 1736. § 3. Joachim Georg Darjes (1714-1791), Introductio in artem seu Logicam theoretico-practicam, Jeane 1742. § 4. Christian August Crusius (1715-1775), Weg zur Gewissheit und Zuverlässigkeit der menschichen Erkenntnis (1747), in Die philosophischen Hauptwerke, hrsg. v. G. Tonelli, Vol. III, Hildesheim 1965. § 5. David Hume (1711-1776), *Enquiries Concerning the Human Understanding* and Concerning the Principles of Morals (1748) ed. L. A. Selby-Bigge, Oxford 1951, §§ 131-132. § 6. The diffusion of the classification of the "Encyclopédie".

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§ 8. Condillac (1775), D'Alembert and the new "metaphysics".

Étienne Bonnot de Condillac (1714-1780), *Cours d'études* (1775) dans *Oeuvres philosophiques* (3 voll.), Paris 1947-1951: A regular division of the sciences is expounded at the beginning of the *Art of Reasoning* (I, pp. 617-620); Jean le Rond D'Alembert (1717-1783), *Discours préliminaire de l'Encyclopédie* (1751) ed. Ducros, Paris 1930.]

2.

——. 1975. "Kant's Critique of Pure Reason within the Tradition of Modern Logic." In *Akten des 4. Internationalen Kant-Kongresses (6-10 April 1974)*, 186-191. Berlin: Walter de Gruyter.

Reprinted in: Giorgio Tonelli, *Kant's Critique of Pure Reason Within the Tradition of Modern Logic. A Commentary on Its History*, edited by David H. Chandler, Hildesheim: Georg Olms, 1994, pp. 1-10.

Italian translation in: G. Tonelli, *Da Leibniz a Kant. Saggi sul pensiero del Settecento*, Napoli: Prismi, 1987, pp.285-291.

"It is obviously impossible to understand a book correctly, if it is not clear what that book is about. It may seem strange, considering how much work has been done on Kant's *Critique of Pure Reason*, that it has not yet been finally established what the subject matter of this treatise is. According to an earlier interpretation, dating from the beginning of the nineteenth century, and still accepted in the English-speaking countries, it is a treatise on the theory of knowledge. According to an interpretation dating from the twenties of our century, and originating from Nicolai Hartmann, Max Wundt and Heinz Heimsoeth, it is a treatise on metaphysics. It is my contention that the subject matter of the *Critique of Pure Reason* cannot be properly defined as theory of knowledge (gnosiology, epistemology), and that defining it as metaphysics is correct, but only partially: in fact it is, in my opinion, a treatise on logic as much as on metaphysics.

I. The *Critique of Pure Reason* is not a treatise on the theory of knowledge for the simple reason that a particular science called theory of knowledge neither existed in Kant's time, nor existed before as an independent discipline; and Kant certainly did not introduce it, since it does not exist in his vocabulary. I do not know when this new philosophical science was established, but I suspect that it was brought about in the early nineteenth century within the Kantian school, by some philosophers who tried, misunderstanding Kant's teaching, to establish a status for their own interpretation of his doctrines, according to which logic was identified with what Kant calls general logic: thus, the methodological parts of logic had to be given a status of a new science, and the Critique of Pure Reason was wrenched from its original context and made into a theory of knowledge. This had, among other baneful consequences, that of leading students to consider the Critique as a gnosiology in general, and not only, as expressly stated by Kant, as a methodology of pure knowledge. Kant certainly had to refer in his Critique to mixed knowledge as well, but this happened only incidentally in connection with the proper theme of the inquiry." (pp. 1-2)

(...)

II. In fact, the *Critique* is a work on methodology, and, more exactly, on the methodology of metaphysics. It has been argued that the statement: "it is a treatise on method," appears only in the Preface to the second edition (1787). But, for those who are familiar with seventeenth- and eighteenth-century terminology, this fact is spelled out very clearly on many occasions in the first edition, when Kant compares the *Critique* to the "King's road" or "high-road" of metaphysics (*Weg, Königlicher Weg, Heeresstraße, Heeres-Weg,* sometimes *Fußsteig*): the terms way, road, high road, et cetera traditionally and unequivocally referred, for obvious etymological reasons, to method. And the study of method belonged to logic.

A careful reading of the *Critique* shows that this work is one of the "special logics" for the particular sciences, which Kant opposes, as methodologies, to "general logic." These special logics are assigned to the sciences in question as part and parcels of them: ;)ut still, they are the special logics (or methodologies) of those sciences. That Kant did not make this more clear, can be explained by the fact, in the first place, that it seemed to him that he had made it clear enough to those who

understand the philosophical language of his time; and, in the second place, that he usually cared very little to explain what seemed very clear to him.

But conclusive evidence for this view is given by Kant's Reflection 5644 (AK.-

Ausg. XVIII, pp. 285-286), dated by Adickes in 1784-1785. There we read: *Transcendental philosophy precedes metaphysics, which, like logic, does not deal with objects, but with the possibility, the content and limits of all knowledge of pure reason. It is the logic of pure rational knowledge (...). Critique is what inquires into the possibility of the object of metaphysics.*

The dating and the status of this statement are confirmed by a passage in a course on metaphysics offered by Kant in 1784-1785, the so-called *Metaphysik Volckmann* (op. cit., p. 363), where Kant dictated in class, in the introductory part of the course: *Transcendental philosophy is in connection with metaphysics what logic is in connection with philosophy as a whole* (...).

In connection with the pure use of reason, a special logic will be necessary, which is called transcendental philosophy; here no objects are considered, but rather our reason itself, as it happens in general logic. Transcendental philosophy could also be called transcendental logic.

Here it should be noticed that transcendental philosophy (or ontology) is identified with the *Critique*: it is well known that Kant identified them in the nineties, but actually this identification occurred much earlier—in fact, it is also in some Reflections prior to 1781. I shall add that the two statements quoted are by no means isolated: only, they are those where the fact under consideration is stated most clearly." (pp. 4-5)

 _____. 1975. "Conditions in Königsberg and the Making of Kant's Philosophy." In Bewusst sein. Gerhard Funke zu eigen, edited by Bucher, Alexius J., Druë, Hermann and Seebohm, Thomas M., 126-144. Bonn: Bouvier Verlag H. Grundmann. Italian translation in: G. Tonelli, Da Leibniz a Kant. Saggi sul pensiero del Settecento, Napoli: Prismi, 1987, pp. 149-168.

"Obviously, general political and religious conditions in Prussia strongly infgluenced Kant's political and religious thought, and this also needs some further study. But I want to consder here is the intellectual situation in Königsberg in the years of the early development of Kant's philosophy, beginning with those precedent that are necessary in order to understand it. In fact Königsberg and hisuniversity in particular, the Albertina, were the scene of some acrimonious struggles of religiousphilosophical parties, which cannot have left no trace n Kant's philosophical perspective, nurtured in that environment. The fact in question have been ignored as a significant pattern by Kant's biographers, inclusive of Vorländer, who did not realize their importance, and was attitude was not conducive to understanding it, as the predominantly hagiographic inspiration of their works did not incline them to look into some unpleasant intrigues, ot to attach them any importance in connection wirh Kant." (p. 127)

understand its XVIIIth Century developments. Fortunately, I can refer to some studies on the subjects which, at least, partially describe the precedents of the issues in question (1). It is noteworthy, that XVIIth Century philosophy had already very much simplified these issues, in comparison, e. g., with their treatment during the Renaissance (2). The XVIIIth Century introduces, comparatively, a further simplification, although this problem is still amply debated and connected with many basic questions.

However, after Kant loaded these terms with multifarious and mostly new meanings, they underwent a revival which has lasted until our days. But, in order to understand these developments, it is essential to reconstruct their immediate historical premises, which only can make them adequately intelligible.

4.

It can be said in general that, according to an ancient tradition, the analysis or *resolutio* (*Auflösung*) is that cognitive procedure which, beginning from sensible and/or complex representations, aims at establishing their constituent parts, and, furthermore, the constituent parts of these parts, until some "simple" or "irresoluble" elements, or the "causes" of the "effects", are reached, which are the "elementary notions" or the "first principles".

The synthesis or *compositio* (*Zusammensetzung*), on the contrary, begins with those elementary notions and first principles, and, combining them and deducing from them, elaborates more complex notions and propositions, viz. derives the "effects" from the "causes", until it reaches, if it can complete its procedure, at least a part of those representations which were at the foundation of the analytical process, and, also, new representations not offered by experience. Thus, both processes coincide at least partially in their results, as the basic two scientific methods proceeding in opposite directions, which are called to perform different tasks, but also to confirm each other.

Their nature and function raise, of course, many controversies. The basic problems are the following: 1) What is the nature of the elementary ideas and of the first principles which the analytical method aims to reach, and which lie at the foundation of the synthetic process; 2) What are the proper aim and use of the two methods in philosophy. The answer given to these questions shall fundamentally affect the conception of both methods as understood by the different philosophers. It is also necessary to keep in mind that the terms in question are not only used in philosophy. They are also currently part and parcel of the chemical terminology, and mathematicians used the term "analysis" since the Greek antiquity. These different meanings sometimes interfere with the philosophical ones: therefore I shall occasionally refer to them, in particular when this interference occurs." (pp. 178-179)

(1) See L. M. Regis, "Analyse et synthèse dans l'oeuvre de Saint Thomas", Studia Mediaevalia in honorem ad. Rev. P. R. J. Martin, Brugis Flandr. 1948, pp. 303 ff.; H. Schepers, A. Rüdigers Methodologie und ihre Voraussetzungen, Köln 1959 (Erg.-Hefte der Kant-Studien, N. 78), pp. 18 ff.; S. E. Dolan, "Resolution and Composition in Speculative and Practical Discourse," Laval théologique et philosophique, VI, 1950; H. J. de Vleeschauwer, More seu ordine geometrico demonstratum, Pretoria 1961 (Mededelings van die Universiteit van Suid-Afrika, C. 27); N. W. Gilbert, Renaissance Concepts of Method, New York, 1960; J. H. Randall jr., The School of Padua and the Emergence of Modern Science, Padova 1961; E. de Angelis, Il metodo geometrico nella filosofia del Seicento, Pisa 1964 (p. 59 ff. in particular); A. Crescini, Le origini del metodo analitico. Il Cinquecento, Udine 1965; H. Schüling, Die Geschichte der axiomatischen Methode im 16. und beginnenden 17. Jahrhundert, Hildesheim-New York 1969; W. Röd, Geometrischer Geist und Naturrecht. Methodengeschichtliche Untersuchungen zur Staatsphilosophie im 17. und 18. Jahrhundert, München 1970 (Bayerische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Abhandlungen, Neue Folge, H. 70.); H. W. Arndt, Methodo scientifica pertractatum, Berlin-New York 1971; Historisches Wörterbuch der Philosophie, ed. by J. Ritter, Vol. 1, Basel -Stuttgart 1971, s. v. "Analyse/Synthese", by L. Oeing-Hanhoff; C. B. Boyer, "Analysis: Notes on the Evolution of a Subject and a Name", The Mathematics Teacher, XLVII, n. 7, Nov. 1954; A. Crescini, Il problema metodologico alle origini della scienza moderna, Roma 1972.

The most comprehensive XVIIth century treatise devoted to the subject is M. Eifler, *Methodologia particularis*, Regiomonti 1639. It is also essential to realize that there were many discussions about the methods in question in Protestant theology: the so-called Lutheran orthodoxy was committed to the analytic method, although it conceived it in a different way from that of the philosophers. See E. Weber, *Die analytische Methode der lutherischen Orthodoxie*, Habil.-Schr. Halle, Naumburg a. S. 1970; id., *Der Einfluß der Protestantischen Schulphilosophie auf die orthodox-lutherische Dogmatik*, Leipzig 1908, I Hpt.

(2) De Angelis, Op. cit., pp. 116-117; Arndt, Op. cit., passim.

5.

——. 1976. "The Philosophy of d'Alembert. A Sceptic beyond Scepticism." *Kant Studien* no. 67:353-371.

"D'Alembert's philosophical work is studied very little in our time, with the sole exception of his Discours préliminaire whidi, for obvious reasons, cannot be so easily ignored (1). We are now provided with an excellent modern biography of our author (2), whose scientific work has also been studied recently (3), but as for his philosophy we still have to rely on Muller's monograph, on a little known, onesided but penetrating study by Misch, and on a few more recent contributions (4). D'Alembert originally expounded his philosophical views in his Eléments de Philosophie (1759; Eclaircissements, 1767) (5), which I consider the most authentic expression of his thought, whereas, as it could be expected, his philosophical articles in the Encyclopédie (6) evaded many dangerous questions. However, also in the Eléments our author did not speak his mind entirely (7). More daring views are expressed in some posthumous Eclaircissements to the Eléments, and in some letters to Frederick II. Obviously, d'Alembert's Discours préliminaire of 1751 is also a document of basic importance.

What I contend is (1°) that d'Alembert's philosophy is a radical form of scepticism, in the spirit of what is in my opinion the main trend in French Enlightenment philosophy, as represented by Quesnay, Condillac, Maupertuis, Buffon, etc. (8). And (2°) that d'Alembert simultaneously strove towards a kind of rationalistic phenomenism which, potentially at least, tended to overcome scepticism in its traditional form.

D'Alembert's scepticism, as that of most French philosophers of his age, had not been hitherto adequately evaluated. Grimsley, Casini, Hankins, and others prior to them, had been aware of it, but they failed to put this view in the correct perspective — simply because this perspective had not yet been introduced. As for G. Klaus, this is his main contention against Ley's materialistic interpretation, but his perspective is strictly Marxistic, and is limited to some general statements. But I do think that this is the key for understanding d'Alembert's individuality as a philosopher, and for finding a solution for what has recently been called "the problem d'Alembert". From this standpoint, I think that I can show that d'Alembert as a philosopher was not an alter ego either of Voltaire, or of Diderot, or of Condillac: Voltaire and Diderot merely underwent temporary sceptical crises, and Condillac was nothing more than a half-sceptic (9), whereas d'Alembert was in fact much closer to Maupertuis. Still, d'Alembert's views can not be reduced to those of Maupertuis for plenty of good reasons: among which, I want to stress, is his attempt towards overcoming that scepticism which, most probably, has originally been his basic philosophical motivation; this attempt probably corresponds to what some scholars call d'Alembert's "rationalism", but this could not be correctly interpreted as long as it was not located into the perspective of d'Alembert's scepticism. I certainly do not mean that this perspective, and in particular the account I shall give of it in this paper, could exhaustively describe d'Alembert's personality as a philosopher: there is obviously much more to it. But this view, if further developed, could provide an hitherto missing individualized nucleus for an adequate foundation of a -renewed exploration of d'Alembert's contribution to philosophy."

(1) See: R. McRae, *The Problem of the Unity of the Sciences: Bacon to Kant*, Toronto 1951, p. 107 f.; M. Da Ponte Orvieto, *L'unità del sapere nell'Illuminismo*, Padova 1968. H. Dieckmann, *The Concept of Knowledge in the Encyclopédie*, in: *Essays in Comparative Literature*, ed. by H. Dieckmann, Levy and Motekat, St. Louis, Mo. 1961. A new edition of F. Venturi's book of 1946, *Le origini dell'Enciclopedia*, was published Torino 1963.

(2) R. Grimsley, Jean d'Alembert (1717-83), Oxford 1963.

(3) Th. L. Hankins, Jean d'Alembert. Science and the Enlightenment, Oxford 1970. Hankins pays very little attention to d'Alembert's philosophy, whose importance he explicitly denies. W. L. Scott, in his *The Conflict Between Atomism and Conservation Theory 1644—1860*, London — New York 1970, devotes several pages to d'Alembert's views on the subject. F. Diaz, in his *Filosofia e politica nel* *Settecento francese*, Torino 1962, studies rather extensively d'Alembert's political position.

(4) M. Muller, Essai sur la philosophie de Jean d'Alembert, Paris 1926; G. Misch, Zur Entstehung des französischen Positivismus, Berlin 1900; see also: M. Förster, Beiträge zu Kenntnis und Charakter der Philosophie d'Alemberts, Diss. Jena 1892; A. Körbel, D'Alemberts Vorrede zur Enzyklopädie, Progr., Bielitz 1907; L. Kunz, Die Erkenntnistheorie d'Alemberts, Archiv für Geschichte der Philosophie, XX, 1907; M. Schintz, Die Anfänge des französischen Positivismus 1: D'Alemberts Erkenntnislehre, Straßburg 1914; A. Carrigós, Juan d'Alembert, artifice de la filosofia de la moral, Revista de Correos y Telégrafos, XLII, 1941; H. Ley, Zur Bedeutung d'Alemberts, Wissenschaftliche Zeitschrift, I, 1951-1952; G. Klaus, D'Alembert und die Materialisten, ibid., II, 1952–1953; H. Ley, D'Alembert und die Idealisten, ibid., II, 1952–1953; G. Klaus, Bemerkungen zur Erkenntnistheorie d'Alemberts, ibid., Ill, 1953—1954; R. E. Butts, Rationalism in Modern Science, d'Alembert and the esprit simpliste, Bucknell Review, VIII, 1959; R. Grimsley, D'Alembert and Hume, Revue de Littérature comparée, XXXV, 1961; M. Retzler, The d'Alembert Question: a Study in Problematics, Diderot Studies VI, 1964; P. Casini, D'Alembert epistemologo, Rivista Critica di Storia della Filosofia, XIX, 1964; O. P. Arvesen, Jean Le Rond d'Alembert, Det Kongelinge Norske Videnskabers Selskabs, Forandeling Bd. 42, 1969, Trondheim 1970; P. Casini, Il problema d'Alembert, Rivista di Filosofia, LXI, 1970; id., Introduzione all'Illuminismo, Bari 1973.

(5) I refer as *EPh* to the edition of the *Eléments* published in d'Alembert's *Œuvres*, vol. II, Paris 1805. This edition was reprinted by Olms, Hildesheim 1965, with the title *Essai sur les Eléments de Philosophie*, with introduction, notes and index by R. N. Schwab, who in his notes lists the variants of the original edition, and refers to the analogous passages in the articles of the *Encyclopédie* and in other works by d'Alembert. (*Ecl.* refers to the *Eclaircissements* (1767) contained in *EPh.*) I refer as *DP* to the *Discours Préliminaire* from the edition by L. Ducros, Paris 1930, as *E* to the first edition (1751—1765) of the *Encyclopédie*, for d'Alembert's articles and Preface to vol. III, and, for his other works, as *OE* to the edition of the *Œuvres* published by A. Belin, Paris 1821 f., 5 vol., and as *OF* for the *Lettres et correspondences inédites*, ed. Ch. Henry, Paris 1789. *TD* refers to the *Traité de Dynamique*, Paris 1743.

(6) The most important are: *Corps, Cosmologie, Démonstration, Dictionnaire, Egoisme, Elément des sciences, Expérimental, Genève, Géomètre, Géométrie, Système.*

(7) Frédéric II, *Œuvres*, Berlin 1846—1849, vol. XXIV, p. 457 (letter to Frederick of Dec. 12, 1766).

(8) For a survey of this trend see my article *J.-P. Changeux and French Enlightenment Scepticism*, Studia Leibnitiana, LV, 1974, where I also discuss the question of a definition of XVIIIth Century scepticism. I discuss another general aspect of this question, *viz.* its connection with the problem of the limits of the human mind, in *The Weakness of Reason in the Age of Enlightenment*, Diderot Studies, XIV, 1971.

(9) See my article quoted in Note 8.

——. 1978. ""Critique" and Related Terms Prior to Kant: A Historical Survey." *Kant Studien* no. 69:119-148.

"Incredible as it may seem, the boundless secondary literature about Kant does not offer one single account of the history of the term "Critique" prior to its appearance in his works. This neglect probably stems from the feeling that the meaning of the term in question can be taken as a matter of course, and that, after all, this term is so widely used that it has not much of a specific meaning left, — albeit in its derivation "Criticism", as one of the denominations of Kant's school of thought, i. e. as a synonym of "Transcendental Idealism" or of "Kantianism".

This feeling is only partially justified. In fact, in European languages, during the XVIIIth Century the terms "Critique" (and "Criticism"), with the related "critic"

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(formerly "critick"), "critical" and "to criticize" were extremely fashionable ones, lavishly and promiscuously used. The same happened, e. g. with "reasonable" (vernünfftig) during the first half of the XVIIIth Century, and "pragmatical" (pragmatisch) during the second half of that Century, which were in Germany most popular catch words among intellectuals. However, in the first place, "Critique" etc. were at that time loaded with a greater significance than in ours, as symbols of a general intellectual and social change which partially had taken place, and partially was more or less utopically called for: Kant himself claimed, in the Preface to the first edition of his Critique of Pure Reason, that "Our age is specifically the age of Criticism (Kritik), to which everything must submit" (2); and he was by no means the only one who held this opinion. Now, this has to be taken into account, if we do not want to miss some important rational and emotional connotations implied by these terms in the XVIIIth Century, while in our time they became anodyne words of the common language, having lost their prior charge of sophisticated intellectual belligerency. In the second place, the XVIIIth Century was still close to a time when the meaning of these terms had been much more specific, and occasionally they still retained, or at least echoed this heritage of the past. In the third place, they were developing in the XVIIIth Century a few new specific meanings, to which, as it will appear, Kant's use of "Critique" was significantly related; thus, "Critique" etc. were used by Kant not just casually, as obvious fashionable terms of his time, but also, and, I think, primarily, in a hitherto unsuspected meaningful way which will offer important indications for a better understanding of Kant's work. Still, the field in question has been partially explored. E. Gudemann (s.v. "Kritikos" in A. F. Pauly, G. Wissowa, W. Kroll, Real-Enzyklopädie der klassischen Altertumswissenschaft, vol. XI, Stuttgart 1921) and J. E. Sandys (A History of Classical Scholarship, 3 vols., New York 1958, I, p. 6-11) gave some account of the grammatical and literary uses of this terminological complex in Antiquity; R. Wellek ("The Term and Conceptof Literary Criticism", in: R. Wellek, Concepts of Criticism, New Haven and London 1953) offered an excellent outline of its development as "literary criticism", and R. Kosellek (Kritik und Krise. Ein Beitrag zur Pathogenese der bürgerlichen Welt, Freiburg-München 1959, p. 87 ff.) briefly examined some aspects (chiefly the scriptural and the political) of its role in the XVIIth and XVIIIth centuries. I will not duplicate Gudemann's, Sandys' and Wellek's research, which I shall briefly summarize, while basically considering different aspects of the problem." (pp. 120-121)

(...)

"Thus, it can be assumed that if Kant selected the title of "Critique" for his major work, this not only reflected the prestige of a term very fashionable in that time, and the generical meaning of that term in philosophy: but, in accordance with the spirit of his enterprise, he selected it as a qualification of his work as a work primarily on Logic, and in particular on a Logic centered on verification and correction (226). And this is perhaps the sole probably direct influence of Catholic thought of that time on Kant's major work." (p. 147)

(226) See G. Tonelli, *Kant's "Critique of pure Reason" within the Tradition of Modern Logic*, Part II, Ch. IV, in preparation [1994], on the term "Critique" in Kant.

7. ——. 1978. "Themiseul de Saint Hyacinthe (H. Cordonnier, 1684-1746). A Smiling Sceptic." *International Studies in Philosophy* no. 10:163-166.
"Although he is completely unknown from this viewpoint, Saint Hyacinthe is not only interesting, but surprising. Humorous and embattled, this journalist and erudite had to emigrate to Holland where he died (2). In 1743 he published his *Recherehes Philosophiques* (3), a quite remarkable work, particularly for the considerable knowledge of ancient philosophy it shows, as well as of the philosophy of the XVIIth Century: a knowledge which at least in part undoubtedly is direct. St. Hyacinthe, for example, certainly read Descartes very carefully. This stock of knowledge, with their finesse and rigour, are set to work, as we shall see, with the art of a great juggler.

S1. Hyacinthe belongs to that sceptical trend which was one of the major features of the French Enlightenment, echoes and adapts to his own ends preceding doctrines, and opens the path for future developments (2).

The *Recherches* bear a dedication to the King of Prussia, Frederik III (*sic*), who already had made a reputation as a protector of the unbelievers, and this may have fostered some hopes on the part of the author. But either our author was not very informed of the genealogy of the King, or this is one more joke, perhaps a revenge for help denied.

The work begins with a detailed discussion of the different philosophical systems, all of them rejected for whatever reasons. But in saying, that he intends to establish a philosophy as solid as mathematics, in going out of his way in order to stress the need for an exact terminology, and in discussing the problems arising from this view, our author is especially hard on the sceptics. When we see later how solid he considers mathematics to be, and what sleights-of-hand he performs with the terms he uses, we will have some good reason to believe that these initial protestations are a manifestation of the author's sense of humor rather than of his speculative preoccupations." (p.163)

(...)

"What does all this mean? It is clearly empty talk: if we establish that we do not know the « ground of the existence» of all things « as they are in themselves », because all we know are the properties of these things, coming thereupon to the conclusion that, *therefore*, these properties are « the thing itself as much », and they « allow to know» the ground of its existence, we run into a patent *non sequitur*: all is saved, with the exception of logic.

In so doing, our author revives a similar theses supported by Brunet, transforming it into a caricature (5).

On this shaky foundation, St. Hyacinthe triumphantly proceeds to prove God's existence (pp. 323-355) and that of the finite beings; we also learn that the soul is different from matter (p. 487), and some more edifying truths.

The pleasurable reading of this book, which is of a remarkable intellectual standing, is only limited by the afterthought that the author could have developed (if it is licit to say « could have» while dealing with history), on the foundation of his scepticism, a revolutionary subjective phenomenism, instead of intrenching himself

into the caricature of traditional metaphysics. Perhaps he was prevented from doing this either by the conditions of his time, or by his own stand as a radical sceptic. However, St. Hyacinthe's philosophy represents an extreme case which can not be

ignored if we want to understand the atmosphere of his time, and the

presuppositions for the rise of a much more solid kind of scepticism: that of Maupertuis and D'Alembert, although we can not be assured that they knew St. Hyacinthe's work, and, if so, whether they profited from it." (p. 166)

For a survey of French XVIIIth Century scepticism see my article « Pierre Jacques Changeux and Scepticism in the French Enlightenment», in *Studia Leibnitiana*, VI, 1974, p. 112 ff.

(2) See: P. M. Horsley, « The de Saint Hyacinthe», *Comparative Literature Studies*, IV, 1943.

(3) *Recherches philosophiques sur la nécessité de s'assurer par soi-même de la vérité…*, Rotterdam et La Haye 1743.

(5) Claude Brunet, *Journal de Médecine*, Août, Septembre, Octobre 1686, pp. 209-285.

——. 1979. "The Scepticism of François Quesnay." *International Studies in Philosophy* no. 11:77-89.

"François Quesnay (1694·1774), professionally a surgeon and physician, is famous for his works on Economics, as one of the major figures of the Physiocratic school; also his medical work has been given some attention, but his philosophical stand has been entirely neglected, although it seems to me to be very remarkable. The ideas Quesnay deals with certainly exerted an important influence on Quesnay's friends

8.

Diderot, d'Alembert, Helvetius, Buffon, Turgot, etc., and certainly did not escape Maupertuis' attention.

A first statement of Quesnay's philosophical views can be found in his *Essai physique sur l'économie animale,* first published in 1736 in one volume; we will study it in the much enlarged three-volume edition of 1747. This work is sometimes quoted by XVIIIth Century experts, but its basic meaning and its importance have not been recognized. "Animal economy" meant, in the language of that time, "physiology" in a very wide sense; but only vol. II of this work deals with physiology proper, while vol. I provides a general philosophical foundation, and vol. III examines the psychical powers of man." (p. 77)

(...)

"In conclusion, Quesnay does not question the metaphysical notion of "cause," but he asserts that we can not know causes as they are in themselves; however, this does not prevent us from establishing them phenomenally in order to give a foundation to empirical knowledge." (p. 81)

(...)

"Volume VI of the *Encyclopédie* (1756) contains an article "Evidence (*métaphysique*)" by Quesnay, (6) which in fact is a short survey of the basic points of philosophy in general. Here, our author tries to convey his scepticism in a more subtle way than in the *Traité*, and several times pretends to fight against Pyrrhonism (p. 765, 779, 785). Besides other differences, he seems to lean toward Malebranchism much more than in the *Traité*, and this is easy to understand if we realize that Malebranche's thought provided excellent

ammunition for the sceptics, as the examples of Foucher, Lanion, etc., prove. This attitude is certainly explained by the fact that this article appeared in a collective and already very famous work: a more open stand could have compromised other people and the entire enterprise which, as facts would show very soon, already contained sufficient grounds for scandal." (p. 83) (...)

"Comparing the doctrines of the article "Evidence," with those of the *Traité*, we can notice some interesting particular differences, besides the peculiar general tone described at the beginning of this section. The activity of the mind, still accepted in the *Traité*, is reduced in the article to almost complete passivity. The more daring tone of the *Traité* finds its expression in the doubt cast on the difference between dream and reality and on the hypothesis of the vision in God, in the possibility of the inherence of motion to matter, of the materiality of the soul, and in the foundation of the immortality of the soul in divine justice only - all these points are abandoned in the article of the *Encyclopédie*.

A few more interesting philosophical doctrines can be found in the *Recherches* philosophiques sur l'evidence des vérités géometriques (Paris 1773).

To this late work Quesnay prefixed an introduction entitled *Examen des advantages de la géometrie sur la métaphysique*. Here our author introduces a distinction between demonstrative geometry, which is evident because its propositions are founded on sensation, and the geometry "of the imperceptibles" (p. V) or

"indeterminables" (p. XXIV), (10) also called "metaphysical geometry" (p. 111): no metaphysical ideas can be demonstrated (p. IX; cf. p. XLIII). The senses can found the truths of demonstrative geometry because

geometrical points are sensible, and not merely ideal as mathenlatical points (p. XIII); although they are not physical points, because they are not divisible (p. XIV), they are extended (p. XXXI). The finite, not the infinite, is the object of geometry (p. XXXIV-XXXV). Obviously, this view of geometry is similar to that of Hume, and could have been suggested by him." (p. 88)

Editor's note: The author completed a first draft of th is paper on the day before his death. Mrs. Grazia Tonelli and the editors have made minimal stylistic corrections, but otherwise publish it as he left it.

(6) Quoted from F. Quesnay, *Oeuvres économiques et philosophiques*, ed. Oncken, Francfort 1888 (reprint Aalen 1965).

(10) For "Indeterminable Geometry" see: Ch. Hutton, *Mathematical and Philosophical Dictionary*, London 1795 (reprint Hildesheim-New York 1973), art. "Indeterminable."

9.

Tonelli found widely held interpretations of Kant to be inadequate, even wrong. At the end of that brief summary, given at the Fourth International Kant Congress in Mainz, Tonelli promised to publish a book with the detailed justification for this rethinking of Kant. Here is that book.

Tragically Tonelli's life was cut short. Though he had hoped to include more chapters, the evidence Tonelli provides is ample in the three he was able to complete. Kant scholars will find it necessary to reconsider received interpretations and assumptions in light of this ground-breaking work.

The richness, complexity and development of Kant's thought can never be exhausted. New paradigms are indispensable in order to deepen our understanding. This is perhaps the central significance of Giorgio Tonelli's life-long scholarly endeavors. Providing the historical and conceptual details that suggest new interpretations and approaches, it becomes possible to question some widely accepted assumptions and interpretations. What is undoubtedly most valuable for English-speaking Kant scholarship is that this brings us ever closer to understanding ideas and their development in Kant and his predecessors in their original historical context. Such a hermeneutical principle is crucial in approaching any text. Very specific studies in the original sources must be the foundation of scholarship. On the other hand, the critical scholar must distinguish carefully a source of an idea from merely the historical background for an idea. This distinction was perhaps occasionally blurred in Tonelli's corpus." (pp. XII-XIII)

(...)

"At virtually every mention of the Jäsche *Logic* Tonelli includes the dates 1782 and 1790. Referring to two notebooks from these years shows that Tonelli does not seem to understand the source of the Jasche Logic. The work of Terry Boswell provides the most current estimate vis-a-vis the sources of this work. They likely include students' notes, Kant's reflections, editorial additions by Jäsche and material from Meier's compendium on logic, which text Kant used in his logic courses for some forty years. See Boswell's "On the Textual Authenticity of Kant's Logic," *History and Philosophy of Logic* 9 (1988), pp. 193-203; and his *Quellenkritische Untersuchungen zum Kantischen Logikhandbuch* (Frankfurt am Main, Bern, New York, Paris: Peter Lang, 1991; in the series *Studien zur Philosophie des 18. Jahrhunderts*, vol. 3).

At the time Tonelli wrote, the widely accepted date for the *Wiener Logik* and the *Logik Pölitz* was 1790. Thanks to subsequent computer analysis of word usage and frequency, the best estimate today is that they were written in the early 1780s. The most helpful resource on this issue is Norbert Hinske's "Einleitung" in *Kant-Index*, vol. 14: Personenindex zum Logikcorpus, ed. Norbert Hinske, et al. (Stuttgart-Bad Cannstatt: Friedrich Frommann Verlag, Günther Holzboog, 1991; in the series *Forschungen und Materialien zur deutschen Aufklärung*, Abteilung III: Indices, vol. 18), pp. ix-cv. Consequently, all Tonelli's references to the dates of these works have been dropped." (pp. XV-XVI)

Popkin, Richard H., De Olaso, Ezequiel, and Tonelli, Giorgio, eds. 1997. Scepticism in the Enlightenment. Dordrecht: Kluwer.
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"This volume contains a discussion between three scholars in the history of philosophy, myself [R. H. Popkin], the late Giorgio Tonelli and the late Ezequiel Olaso. What started the discussion was a brash paper I gave on "Scepticism in the Enlightenment" at the first international congress on the Enlightenment, held in Geneva in the summer of 1963. Soon thereafter two brilliant younger scholars, Giorgio Tonelli and Ezequiel de Olaso, started publishing studies leading from what I had said, and showing areas that I had not probed, and offering interpretations that went much further than what I had originally presented.

Tonelli, in one of the essays published here, said, "The only survey of Enlightenment scepticism we have is a well known article by R.H. Popkin, which provides a broad frame of reference, but which neglects many details". Olaso called my study a pioneering one, "the first all-embracing survey of [scepticism] of the period". But both of these scholars pointed out right away that there was much more to said on the subject than what I had presented.

"Scepticism" is a loose term that has been used to apply to any kind of doubts, and particularly, doubts about certain aspects of the Judeo-Christian religion. It also applies to a rigorous epistemological doubt about the possibility of attaining knowledge that cannot be questioned. It is this latter sense that we were concerned with, the legacy of the Greek sceptical traditions of the Pyrrhonists and the Academics during the eighteenth century. We had many discussions in person and in writing on this subject. For a decade I continued my original view, that eighteenth century scepticism was primarily and almost exclusively the view of David Hume and those he influenced. However, over time I was overwhelmed by the strength of the arguments and new materials and interpretations that Tonelli and Olaso offered, showing a much richer canvas of epistemological sceptical discussions than I had considered."

(...)

"Giorgio Tonelli was born in 1928 in Italy. He did his undergraduate and graduate studies at the University of Pisa, where he received his doctorate in 1947. He supplemented his studies at the Sorbonne, Basel, Naples and many German institutions. He became professor of German literature at Pisa, and later moved to the United States in 1969 where he became a professor of the history of philosophy at the State University of New York at Binghamton. He published extensively on Kant and on the background of his philosophy, on the German intellectual world of the eighteenth century, and on the philosophical views of many of the philosophes. He sometimes published in French, German, Italian or English. He was also a great initiator of projects to further the study of the history of philosophy. He founded the journal, now called, International Studies in Philosophy: he founded the important series Studien und Materialen zur Geschichte der Philosophie. He was very active in committees and conferences in America and Europe on topics in the history of philosophy and the history of the Enlightenment. He played a most significant role in opening up new topics and outlooks in the history of ideas, and he encouraged many budding scholars in America and Europe." (pp. IX-XI)

Tonelli, Giorgio. 1997. "Kant and the Ancient Sceptics." In Scepticism in the Enlightenment, edited by Popkin, Richard H., De Olaso, Ezequiel and Tonelli, Giorgio, 69-98. Dordrecht: Kluwer.
English translation by John C. Laursen of Kant und die antiken Skeptiker in: H. Heimsoeth, D. Henrich, and G. Tonelli (eds.), Studien zu Kants philosophischer Entwicklung, Hildesheim: Georg Olms, 1967, pp. 93-123.

"The historical problematic of the sceptical tradition since the Renaissance has been raised again recently in a splendid book by Richard Popkin. (1) The author traces the relationships between the revival of ancient scepticism and the new sceptical attitudes from Erasmus to Descartes, and promises a future continuation of his work that will reach down to Kierkegaard. Our investigation here is intended as a contribution to the penultimate steps of that continuation. We shall not be raising the general problem of Kant's relationship to scepticism: a decision about this farreaching question will first be possible when its presuppositions (namely, the progress of the sceptical tradition up to Kant) have been clarified. We will therefore mainly limit ourselves to one part of the problem: Kant's relationship with the ancient sceptics, with special attention to terminological questions. It goes without saying that one should not believe that this part of the problem can be considered wholly in isolation. One reason for this is that in all likelihood Kant's knowledge of ancient scepticism was not based on a firsthand study of the ancient Greek texts, (2) but rather on the received image of the Greek sceptics, mainly as it was to be found in the modern sceptics, their opponents, and the historians of philosophy of the times. It will therefore be necessary to allude to some aspects of the history of modern scepticism; especially to Pierre Bayle and his followers in the eighteenth century.

An evaluation of the attitude of Kant toward the ancient sceptics naturally also presupposes an assessment of his relationship with scepticism in general, and especially to the scepticism of his times. But in respect to this question, as in the case of the previous one, we will limit ourselves to generally accepted features and certain special indications and particulars, in order not to go too far out of the range of our problem." (p. 69)

(...)

"What, then, is the state of the case with Kant's "scepticism"? First, one must distinguish between the pre-Critical and the Critical periods. At the end of the first, and indeed between 1765 and 1768, the "zetetic" attitude of 1765 and many places in the Dreams of a Spirit-Seer signal a certain approximation to scepticism, with respect to which Hume probably played a certain role, although not one which can be ascertained any more exactly. (138) But Kant should still not be considered as a follower of mitigated (and even less of radical) scepticism in this period according to the traditional meaning of this characterization, just as little as he should be considered an empiricist at that time. Kant had indeed excluded from the realm of human knowledge many areas of metaphysics and established that other areas were knowable only empirically. He had also rejected all abstract and purely a priori grounded metaphysics through his grounding "in concreto" of philosophy. But through his proofs "in concreto" he thought he could reach some metaphysical truths of absolute and not purely of empirically universal validity. His position thus belonged to the problematic of the limits of human understanding, and not to the classical problematic of scepticism. His undeniable bent toward scepticism of this period was thus only selective and partial (in that in connection with some problems concerning supersensible objects he was a radical sceptic; in connection with other objects that are knowable purely empirically he was a mitigated sceptic; and in connection with further problems concerning metaphysically knowable objects, he was not sceptical at all). That is, his doubts should be understood as preliminary (Cartesian) doubts. Kant's position thus should not be considered sceptical in the true sense.

In the Critical period, Kant's rejection of ancient scepticism and of every "radical" scepticism stands as a final result. It is true that he sharply defined the limits of our knowledge, and everything beyond the empirical was excluded. But significant chief indicators distinguish his position from "mitigated" scepticism. He was convinced that he had constructed a firmly founded system.

He maintained that men were capable of universal and necessary knowledge within the realm that was left to them, although this may not correspond to the most basic being of things.

Apart from all the other recognized differences that separate Kant from mitigated scepticism, these two above-mentioned chief indicators should be sufficient to demonstrate that his expressed personal attitude should not be considered a palingenesis of the scepticism of his times, and that Kant's protestations that he fought scepticism by using the sceptical method should be taken as earnest, and not only with respect to radical but also with respect to mitigated scepticism. Thus, Kant not only broke a middle way (as Bacon, Gassendi, Bayle (139) and many others, especially in Kant's time, had tried to do), but broke a new way between dogmatism and scepticism, in which the old opposition between the two positions was for the first time set up on a fully new plane, even if it was not finally transcended. Also with reference to its sources, Kant's philosophy ought not to be considered as a development or even a fundamental renovation of the empirical scepticism of his age. The Critique of Pure Reason owes too many of its basic concepts to the German scholastic tradition, especially as it had been developed in the 1760's and 1770's by the students of Crusius, Hollmann, and Darjes (as we hope to show in another place), for it to be considered simply as a product of "modern forces". It is rather a creative synthesis of the "old" and the "new", where "old" and "new" are concepts that are purely relative and subject to easy reversal." (pp. 85-86) (1) Richard H. Popkin, The History of Scepticism from Erasmus to Descartes, Assen 1960; see the review by G. Tonelli, Filosofia XV, 2, 1964, [pp. 327-332] (also appearing separately under the title Un libro sallo scetticismo da Erasmo a Descartes, Torino 1964) for a detailed discussion of the special methodological problems of this theme. Further: M.L. Wiley, The Subtle Knot. Creative Scepticism in XVIIth Century England, London 1952; H.G. Van Leeuwen, The Problem of Certainty in English Thought 1630-1690, The Hague 1963; R.A. Watson, The Downfall of Cartesianism, 1673-1712, The Hague 1966; R.H. Popkin, "Scepticism and Counter-Reformation in France", Archiv für Reformationsgeschichte, LI, 1960; R.H. Popkin, "The High Road to Pyrrhonism", American Philosophical Quarterly, II, 1965; R.H. Popkin, "The Traditionalism, Modernism, and Scepticism of René Rapin", Filosofia, XV, 1964; and especially R.H. Popkin, "Scepticism in the Enlightenment", Studies on Voltaire and the XVIII Century, XXVI, 1963, where the author simplifies the perspective set forth in his book, taking into account only "absolute scepticism" and the reactions against it.

(2) We have indeed found no grounds for assuming that Kant had even read Sextus Empiricus. See, in general: A. Samson, *Kants kennis der Grieksche philosophie*, Alphen a. d. Rijn, 1927 (Utrecht Dissertation).

(138) Compare Tonelli, "Die Anfänge von Kants Kritik der Kauzaibeziehungen", *Kant-Studien* 57, 1966, pp. 417-456.

(139) Compare Gassendi, Opera, op. cit., I, p. 79; Van Leeuwen, op. cit, pp. 6,105.

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