

Theory and History of Ontology

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Giorgio Tonelli (1928-1978): Bibliography of the Writings on Kant and the Philosophy of the Eighteenth Century

BIBLIOGRAPHY

This page contains a bibliography of Giorgio Tonelli's writings in English; for his essays in Italian, French and German, please follow the links at the bottom of the page.

1. Tonelli, Giorgio. 1961. "Critiques of the Notion of Substance Prior to Kant." *Tijdschrift voor Filosofie* no. 23:285-301.

"The Ages of Reason and Enlightenment aimed not only to advance knowledge but also tried to distinguish carefully between things which can and cannot be known. Characteristic of those ages is the manner in which metaphysical speculation was reduced by the sciences or brushed aside by the leading philosophical schools.

The general problem of the *limits of human understanding* became one of the leading philosophical themes of the seventeenth and eighteenth centuries. Doubts about the possible scope of human reasoning concerned not only God, the spirits, and the nature of the human soul, (1) but also went to the very core of that reality which man was then trying to subdue intellectually; several conceptual elements were discovered whose nature many thinkers found mysterious and inaccessible to the mind. In fact, beside a clear awareness of the limits of human understanding in general, the notions of *mathematical infinity*, (2) *force*, (3) and *substance* were considered by many philosophers to be above man's reason. The purpose of the present paper is to study the criticisms which were directed against the last of these notions, criticisms which played a rather important role in the famous "Copernican revolution" of 1769 at the start of Kant's critical period. (4) We shall consider not only criticisms of the notion of substance itself, but also those of the closely related notions of *essence* and *materia prima*; these often include the notion of substance, or serve as a foundation for." (pp. 285-286)

(1) For opinions about the human soul in that period see: G. Tonelli, *Elementi metodologici e metafisici in Kant precritico* (1745-1768), Cap. VII, § 30 and foll. About God's unintelligibility, *Ibid.*, Cap. VII, § 17 (In the II Vol., to be published in short. Vol. I, Torino 1959).

(2) See G. Tonelli, *Le problème des bornes de l'entendement humain au XVIIIe siècle et la genèse du criticisme kantien particulièrement par rapport à la question de l'infini*, "Revue de Métaphysique et de Morale", 1959.

(3) See Tonelli, *Elementi*, Cap. VII, § 21 and foll.

(4) A not very thorough history of the notion of substance is in K. Heidmann, *Der Substanz-Begriff von Abälard bis Spinoza*, Berlin 1889, (Dissertation).

2. ———. 1963. "The Law of Continuity in the Eighteenth Century." *Studies on Voltaire and the Eighteenth Century* no. 24-27:1619-1638.

"Some excellent research has been made into the eighteenth-century attitude towards the assumption that nature's ways are essentially simple, and towards the principle of least action (1). But another methodologically fundamental principle, upon which the learned men of the time concentrated their attention, and which caused them much bitter argument, namely the law of continuity, has not yet been studied with a more systematic and modern approach. The only historical survey of the question is G. Ploucquet's old dissertation, published in 1761, which one very rarely meets nowadays, for it is almost completely forgotten*.

The purpose of the present paper is to fill this gap. We shall first summarise the question as it stood in the seventeenth century, and we shall try to expound in greater detail the vicissitudes the problem suffered during the period in which we are chiefly interested.

The topics treated by A. O. Lovejoy in his well-known work *The Great chain of being* (1933; the Cambridge, Mass. 1957 edition is quoted), show some important similarities to the question we propose to study. Our problem is in fact much more precise and limited, but this will not prevent us from recalling from time to time some pertinent elements from Lovejoy's book." (p. 1619)

(1) for a bibliography of these works, and an original contribution to the history of that problem, see G. Tonelli, *Elementi metafisici e metodologici in Kant dal 1745 al 1768*, Torino 1959, i. cap.1, nota (80) and cap.u, nota (3).

* G. Ploucquet, *Dissertatio historico-cosmologica de lege continuitatis sive gradationis leibnitiana* (Tübingen 1761).

(...)

"Conclusion.

The case of the principle of continuity in the eighteenth century is very interesting indeed in the history of ideas. It is a good example of a badly defined and exceedingly general principle, whose multifarious applications extended the dispute to widely different fields. One has the feeling that its acceptance or rejection was never based on an independent discussion of its purely theoretical side—whose very imprecision led to a very elastic interpretation, making any abstract examination practically useless; no, they were rather motivated by the more or less welcome consequences which could be drawn from the principle in a specific case, about which an author usually had preconceived ideas, in case, that is, he was not motivated merely by personal hostility towards its real or pretended supporters or detractors. Many of the people partaking in the discussion seemed, wittingly or unwittingly, to ignore at least some of the opinions previously expressed in the dispute, and attacked positions which nobody had thought of defending, and which really only represented a rough vulgarisation of the principle.

The climax of the dispute (the Berlin Academy against Wolff) seems to have been brought about for merely personal motives. In fact at both earlier and later periods the principle played a fairly important rôle in some fields of science more or less independently of theoretical discussions about it, and after the waning of those discussions." (p. 1638)

3. ———. 1966. "Kant's Early Theory of Genius (1770-1779): Part I." *Journal of the History of Philosophy* no. 4:109-131.

Italian translation in: G. Tonelli, *Da Leibniz a Kant. Saggi sul pensiero del Settecento*, Napoli: Prismi, 1987, pp. 183-203.

"The importance of the theory of genius in Kant's philosophy was realized comparatively early in the history of *Kantforschung*, and several works have been devoted to this subject (1) But nobody has, until now, tried to reconstruct the development of Kant's ideas on genius utilizing the materials contained in his *Nachlass*, published by Adickes. (2) This is what I shall attempt in the present paper, limiting the study to the period from 1770 to 1779, coinciding with Kant's preliminary works for the elaboration of the *Critique of Pure Reason* .

First I shall try to establish Kant's opinions on genius in the aforesaid span of time, second, to trace the sources of such opinions in Kant's cultural background." (p. 109)

(1) See especially: K. Hoffman, *Die Umbildung der Kantischen Lehre vom Genie in Schellings System des transscendentalen Idealismus* (Bern: 1907, Berner Studien zur Philos. u. ihrer Geschichte, LIII); R. Schlapp, *Kants Lehre vom Genie und die Entstehung der "Kritik der Urteilskraft"* (Göttingen: 1901); O. Schöndörffer, "Kant's Definition vom Genie," *Altpreussische Monatsschrift*, 1893, xxx; O. Wichmann, "Kant's Begriff vom Genie und seine Bedeutung" *Deutsche Akademische Rundschau*, Jhg. II, 12 Sem., Folge N. 2; 7, 15 Jan. 1925.

Schlapp's work, utilizing Kant's *Kolleghefte* (or notes taken from his lectures), is peculiarly important.

(2) In Kants *Gesammelte Schriften*, published by the Preussische Akademie der Wissenschaften. This is the edition we refer to in our quotations. We give only the number of the volume and the page for the printed works of Kant, and the number of the volume and that of the *Reflexion* for the *Nachlass* . We refer to the last issue of the Preussische Akademie Ausgabe edition. We intend to utilize Kant's *Nachlass* following the same criteria as in: G. Tonelli, *Kant, dall'estetica metafisica all'estetica psicoempirica. Studi sulla genesi del criticismo (1754-1771) e sulle sue fonti* (Torino: 1955), Memorie della Accademia delle Scienze di Torino, Serie 35 Tomo 3, Parte III. See pp. 7-10, 192, 253-255.

4. ———. 1966. "Kant's Early Theory of Genius (1770-1779): Part II." *Journal of the History of Philosophy* no. 4:209-224.

Italian translation in: G. Tonelli, *Da Leibniz a Kant. Saggi sul pensiero del Settecento*, Napoli: Prismi, 1987, pp. 203-234.

5. ———. 1969. "Divinae Particula Aurae; Genial Ideas, Organism, and Freedom: A Note on Kant's

Reflection N. 938." *Journal of the History of Philosophy* no. 7:192-198.

Italian translation in: G. Tonelli, *Da Leibniz a Kant. Saggi sul pensiero del Settecento*, Napoli: Prismi, 1987, pp. 237-245.

"In § 21 of my article "Kant's Early Theory of Genius (1770-1779)," published in this journal (1) two years ago, I quote from Kant's *Reflection N. 938*, of which the complete text is as follows:

Spirit is referred to the universal, because it is a kind of *divinae particula aurae*, and it draws from the Universal Spirit. Therefore, Spirit [in itself] has no particular characters; but it vivifies in different ways, following the different talents and sensitivities [of men] it meets, and, as these are so multifarious, every [human] Spirit has something peculiar. One should not say: geniuses. [But: there is only one genius.] It is the unity of the Soul of the World. (2)

Kant refers to this Spirit as the source of both genial or "original" ideas in the human mind and of organic life in the outside world (KETG, §§ 22, 23). This theory derives of course from the ancient Platonic-Stoic-Hermetic-etc. doctrine of the Soul of the World, which had a tremendous diffusion not only in the Middle Ages (School of Chartres, etc.) but also from the Renaissance to the eighteenth century and even later, especially among Stoic, Cabalistic, Hermetic, Pansophic, and Mosaic philosophers, both in psychology (where the human soul was taken as a part of the soul of the World) and in natural philosophy among the opponents of mechanism (either in general or in connection with living organisms only) (3)."

(1) IV (1966), 209; the article is printed in two parts, pp. 109-131 and 209-224 (cited hereafter as KETG).

(2) "Weil der Geist aufs allgemeine geht, so ist er so zu sagen *divinae particula aurae* und aus dem allgemeinen Geist geschöpft. Daher hat der Geist nicht besondere Eigenschaften, sondern nach den verschiedenen Talenten und Empfindsamkeiten, worauf er fällt, belebt er verschiedentlich und, weil diese so mannigfaltig seyn, so hat ieder Geist was eigenthtimliches. Man muss nicht sagen: Die genie's. Es ist die Einheit der Weltseele" (Immanuel Kant, *Gesammelte Schriften* [Berlin: Preussische Akademie der Wissenschaften], XV [1923], part 1, 416). This *Reflection* is a note on Baumgarten's *Metaphysica*. According to Adickes, it was probably written between 1776 and 1778, less probably in 1772. See "World Soul" (with bibliographical references, by T. Gregory and G. Tonelli) in the 1967 ed. of the *New Catholic Encyclopedia*. A still useful, although very partial, historical account of this doctrine is given by A. Rechenberg (praeses) and J. D. Giltner (Auctor & Respondens), *De mundi anima dissertatio* (Lipsiae, 1678). See also KETG, note 153.

6. ———. 1971. "The "Weakness" of Reason in the Age of Enlightenment." *Diderot-Studies* no. 14:217-244.

Reprinted in *Scepticism in the Enlightenment* (1997), pp. 35-50.

Italian translation in: G. Tonelli, *Da Leibniz a Kant. Saggi sul pensiero del Settecento*, Napoli: Prismi, 1987, pp. 21-41.

"Among the different aspects of the problem of limits I have been surveying, hardly one may be found where eighteenth-century thought had not been heralded in some aspects at least by thinkers of the preceding century. This happens, of course, in all ages and for all problems. In some cases, as for the critique of the notions of substance and of that of infinity, eighteenth-century philosophers were, in the main, repeating old arguments. But on the whole, the Anglo-French Enlightenment gave to these attitudes an importance and a diffusion previously unknown: opposition to ontology, and partially to logic, agnosticism in respect of transcendent subjects in general, claimed ignorance of the inner texture and properties of bodies and of the first causes. Opposition to hypotheses and to general systems not founded on experience are, both in their extension and in their stress, a basic novelty in modern philosophy. For this, seventeenth-century philosophy was much more an Age of Reason than was the Enlightenment; and this "reason" was unmasked by the Enlightenment as a specious and obnoxious pretension of the human mind. The Enlightenment's reason sometimes merely paid lip service to Revelation; however this outer limit of reason was replaced by an inner and more effective one, which could also be reconciled with Revelation, with the advantage, perhaps, of a clearer "separation of powers".

The German Enlightenment was, as it were, more "traditionalist", especially in Wolff's case: only a few of the limiting attitudes were accepted by Wolff. On the other hand, the school of Thomasius and Crusius represented, for very special reasons, a kind of *via media*, and was the catalyzer of a creative synthesis between the Anglo-French and the German approach. In this way, positions which could appear "Traditional" as sponsored by Wolff became the foundation of future German philosophy; "traditionalism" and "modernism" in the history of thought are nothing but relative terms.

If we may still speak of "traditionalism" then, the Enlightenment was on the whole much less revolutionary than it has sometimes been represented; this has already become clear concerning its political theory, but should also be extended to other aspects of the century's thought.

The Anglo-French Enlightenment, with its intellectual modesty and respect for its heralds in the preceding century, shows one side of this attitude, an attitude matched in the practice of a very real quest for discovery, but exalted, at the same time, by an equal respect for science. Philosophy, certainly, is no

longer the servant of theology, but it partially becomes the servant of science. And this is shown, among other things, by the basic impact of Newtonianism on the problem of limits, an impact which has not been as yet sufficiently clarified. In fact, it is a commonplace in our day to talk about Newton's role in the development of philosophy, but as soon as this role is clearly defined, an escape is found in some vague and frequently erroneous statement.

The German Enlightenment, less humble in its intentions, showed its modesty by facts: it refrained from relegating to the scrap-heap many basic attitudes of eighteenth-century thought, and reshaped them into formulas pregnant with future developments.

In contrast to romantic philosophy's frenzy for originality at any cost, the Enlightenment philosophy was not haunted by a quest for novelty for novelty's sake. In fact it gave full regard to its predecessors while simultaneously opening up numerous new directions for science to follow in the ensuing centuries." (pp. 243-244)

7. ———. 1971. *A Short-Title List of Subject Dictionaries of the Xvith, Xviith, and Xviiith Centuries as Aids to the History of Ideas*. London: Warburg Institute.

Second extended edition revised and annotated by Eugenio Canone and Margherita Palumbo, Firenze: Leo S. Olschki, 2006.

Contents: Introduction 1; Symbols for names of libraries 5; List I: Sixteenth, seventeenth and eighteenth century dictionaries as aids to the history of ideas 7; Chronological-systematic index of dictionaries included in List I 37; List II: Pseudo-dictionaries, dictionaries not ordered alphabetically, or of minor importance 43; List III: Dictionaries not located 53; Index of names 57; Index of anonyma 64.

"Introduction.

Historians of sixteenth, seventeenth and eighteenth century ideas are realizing increasingly that dictionaries contemporary with the period under consideration are in many cases a basic aid to their work. Some of these reference books are well-known, and are currently used by scholars in all fields. Nevertheless, a more careful inquiry into this kind of source discloses an unsuspected number of works which are mostly unknown or difficult to locate.

The aim of this bibliography is to provide for the first time an extensive list of these dictionaries and their basic locations in Europe, together with some information concerning their doctrinal affiliations, diffusion and present usefulness. I have been collecting and examining these materials in the major European libraries during the past fifteen years. I acknowledge my debt of gratitude to Professor Enrico de Angelis, Professor Alberto Martino, Dr. P. F. Mugnai (who received a grant from the Consiglio Nazionale delle Ricerche in Rome for this purpose), and my wife, Dr. Grazia Tonelli, all of whom helped me during the final stage of work on this bibliography by research in several libraries; to Miss Pamela Sargent, for revising and typing the manuscript, and to Miss Susan Cabral for typing the indexes.

I hope that my work may stimulate interest in the history of lexicography. Studying the development of the criteria and methods of lexicography, the connexion of dictionaries with doctrinal trends contemporary to them, and their influence on the evolution and diffusion of thought should be a basic field in the history of ideas, as well as a further contribution towards a more adequate use of this kind of source in general research. (a)

This Bibliography is divided into three lists.

The FIRST LIST includes those dictionaries which, first, meet the basic criteria of selection, and second, have been located and examined.

(I) *Criteria of selection:*

(a) Only dictionaries disposed in alphabetical order have been included. In fact, many encyclopaedias are ordered systematically, and cannot be used as dictionaries any more than any general treatise can. Since the only basic criterion which has proved to be generally effective in making a distinction is that of alphabetical order, some works which are strictly related to dictionaries but which do not fulfil this condition have been excluded from the first list (but included in the second).

(b) Only subject dictionaries have been included. Onomastic dictionaries (historical, geographical, etc. which do not list terms, but only names of persons and/or places) have been excluded.

(c) Subject indexes to works, compiled either by authors or by editors, have been excluded, with the exception of a few of major importance, which are traditionally known or frequently referred to as dictionaries.

(d) Works bearing the name of dictionaries, or usually referred to as such, although they are not dictionaries but treatises, have been excluded from the first list (but included in the second).

(e) Dictionaries prior to 1500 or posterior to 1800 have been excluded in general, with the following exceptions: first, of a few dictionaries prior to 1500 which were still influential (and eventually reprinted) after that date; secondly, of a few dictionaries immediately posterior to 1800 which echo ideas of the preceding century.

(f) *Ana*, which are collections of memorabilia or excerpts from the works of a single author (many of which are alphabetically ordered) have been excluded, because they are listed in already existing

extensive bibliographies. (b)

(g) Dictionaries answering to the previously listed criteria, but which are of minor importance, such as bi-lingual dictionaries and compendious dictionaries and encyclopaedias for practical use only, dictionaries of merely linguistic interest, and purely technical dictionaries (e.g., of legal cases, chemical formularies, collections of medical prescriptions, etc.) have been excluded from the first list. Some of them have been included in the second list, because their notoriety or their title might mislead one into considering them useful to the history of ideas. Comprehensive lists of these dictionaries may be found in existing bibliographies of dictionaries. (3)

(II) *Location*. All items included in the first list have been checked as to their presence (1) in the major Roman libraries (as listed below in the list of library symbols); (2) in the Bibliothèque Nationale, Paris (N.P.); (3) in the British Museum (B.M.); and (d) in the Niedersächsische Staats- und Universitätsbibliothek, Göttingen (G.). Normally, locations in other libraries are given only for items which are not to be found in any of the above-mentioned libraries.

N.B. All editions of the same work are listed which have either been examined or identified through library catalogues or general and special bibliographical works and studies. Differences among titles or contents of different editions have been referred to in so far as they could be established in the above ways.

A chronological-systematic index, attached to the first list, and referring to it-only, allows a general view of all items as ordered (1) by centuries, (2) by categories of dictionaries within a century, (3) by the date of the first edition within a category. It is followed by a list of dictionaries devoted to a single author. The SECOND LIST includes items which have been located and seen, but which do not answer to the criteria of selection listed above. The purpose of this second list is: (a) to give an account of items which were seen, but excluded from the first list, in order to establish that they have not been overlooked; (b) to point out that some of them may nevertheless be used as dictionaries. In this case, the location is given. The THIRD LIST includes items which could not be located, although they are listed in bibliographies, or referred to elsewhere. Therefore, their character and utility could not be established. This third list is intended as an aid to further research.

It may be interesting to know that microfilms of dictionaries included in the first list, and not present in Roman libraries, are being collected at the Istituto di Filosofia of Rome University.

(a) Attempts in this direction are: E. H. Lehmann, *Geschichte des Konversationslexikons*, V, Leipzig 1934; B. Wendt, *Idee und Entwicklungsgeschichte der enzyklopädischen Literatur*, Würzburg-Aumühle 1941; K. W. Krauss, 'Zur Lexikologie der Aufklärung', in *Romanische Forschungen*, LXVT, 1955; W. Gerber, sub voce 'Philosophical Dictionaries and Encyclopedias', in *The Encyclopedia of Philosophy*, ed. by P. Edwards, New York-London 1967; L. Geldsetzer, *Einleitung* to J. Micraelius, *Lexicon philosophicum terminorum philosophis usitatorum* (reprint), Düsseldorf 1966. See also Zischka's work, quoted below. For the history of juridical lexicography, see H. E. Dirksen, *System der juristischen Lexikographie*, Leipzig 1834.

(b) H. W. Lawätz, *Handbuch für Büche freunde und Bibliothekare*, T. I, Bd. III, Halle 1789, pp. 476ff.; Jacques Lacombe, *Encyclopédiana, ou Dictionnaire des 'Ana'*, Paris 1791; A. F. Aude, *Bibliographie critique des ana*, Paris 1910. Some titles of this kind do not end in *ana*, for instance: [J. C. Scaliger], *Electa Scaligerea, h.e. J. C. Scaligeri Sententiae, Praecepta, Definitiones, Axiomata, ex universis illius operibus selecta, et per certas Locorum Communium classes disposita . . .*, Hanoviae 1634.

(c) See Durey de Noinville, *Table alphabétique des Dictionnaires en toutes sortes de langues*, Paris 1758; W. Marsden, *A Catalogue of Dictionaries, Vocabularies, Grammars, and Alphabets*, London 1796; N. Trubner, *A Catalogue of Dictionaries and Grammars of the Principal Languages and Dialects of the World*, London 1872, ed. K. W. Hiersemann, London 1882; J. R. Hulbert, *Dictionaries: British and American*, London 1955; W. Zaunmüller, *Bibliographisches Handbuch der Sprachwörterbücher*, New York, London, Stuttgart 1958; G. A. Zischka, *Index lexicorum*, Wien 1959. Many of the items listed in my bibliography are unknown to all these authors.

8. ———. 1972. "Early Reactions to the Publication of Leibniz's "Nouveaux Essais"." In *Proceedings of the Third International Kant Congress* 561-567. Dordrecht: Reidel.

Revised version as: *Leibniz on Innate Ideas and the Early Reactions to the Publication of the "Nouveaux Essais" (1765)* .

"Leibniz' *Nouveaux Essais*, written in 1703-05 (cited in the following as: N E), were posthumously published by Raspein 1765, at the beginning of a moderately significant Leibniz revival. Now, as the great upheaval in Kant's thought took place in 1769, and as one of the main characteristics of this upheaval was the rejection of sensibility as the sole source of knowledge, it is easy to infer that Kant's reading of the N E may have been one of the elements which prompted him to adopt his new solution. It is not my ambition to answer this difficult question at this time but I will try to clear the ground for an answer to it by inquiring into the early reactions of philosophical circles, especially German, to the appearance of the N E. If the peculiarity of the doctrines of the N E concerning the origin of knowledge

was widely noticed, and if the picture of Leibniz' philosophy was modified accordingly, Kant could have been stimulated by such a widespread reaction to pay special attention to the problem." (p. 561)

9. ———. 1972. "A Contribution Towards a Bibliography on the Methodology of the History of Philosophy." *Journal of the History of Philosophy* no. 10:456-458.

"A recent issue of the *Monist* (53, 4, October, 1969) was devoted to the "Philosophy of the History of Philosophy." The articles were prefaced by an "Introduction and Bibliography" by Lewis White Beck. The following list is an addition to that bibliography, omitting those contributions not contained in it but quoted in other places in the same issue of the *Monist* ." (p. 456)

(...)

I also wish to point out that, obviously, the methodology of the history of philosophy would greatly profit from taking into consideration methodological research in other branches of history. This includes not only general history, history of science, and the sociology of knowledge (which are rather easy to reach bibliographically), but also those branches of history less obviously connected with our interest or less well-known in English-speaking scholarship:

(1) Hermeneutic. This ancient approach, employed again by Joachim Wach (*Das Verstehen*, Tübingen, 1926. Reprinted, Hildesheim, 1966), was revived with major changes by Emilio Betti (*Teoria generale dell'interpretazione*, 2 vols., Milano, 1955). It evoked a tremendous response in Germany, culminating in the famous work by Hans-Georg Gadamer, *Wahrheit und Methode*, Tübingen, 1960. The ensuing debate about this work brought forth a very large number of subsequent contributions.

(2) Special attention should be paid to the methodology of etymology, onomasiology and semasiology -- branches of philology closely related to the history of ideas. The most important contributors to this field are Kurt Baldinger and Helmut Gipper. The point of view of the latter was summed up by H. Gipper and H. Schwarz in the "Introduction" to their *Bibliographisches Handbuch zur Sprachinhaltsforschung* (König und Opladen, 1962). The *Handbuch* itself, an indispensable tool for all historians of ideas, has not yet been completely published.

(...)

(3) Also to be kept in mind is the methodology of the history of art, especially useful in connection with the problem of periodization. In this respect, after the well-known W. Pinder's *Das Problem der Generation* (reprinted, Munich, 1961), it is necessary to mention E. H. Gombrich's *Norma e forma: Critica valutativa e morfologia stilistica nella storia dell'arte* ((Torino, 1963. Quaderni della "Biblioteca filosofica di Torino," No. 6), and the discussion on "Criteria of Periodization in the History of European Art," in *New Literary History* 1 (1970)." (pp. 457-458)

10. ———. 1973. "A Contribution to the Bibliography of General Subject Indexes." *Studi internazionali di filosofia* no. 5:211-214.

"Professor Archer Taylor, the famous bibliographer and historian of bibliography, published a history of the *General Subject-Indexes Since 1548*, Philadelphia, University of Pennsylvania Press, 1966, 335 p. This work is a new pioneering enterprise of its author: in fact it is the first in its field. It is a detailed study of the development of general bibliographical subject-indexes of books since the Renaissance, i.e., it lists and discusses all those bibliographies: (a) which are ordered by subjects, alphabetically or systematically; (b) but which are general, i.e., not limited to a particular held (e.g., Theology only, Medicine only, etc.). General subject-indexes limited to a single nation and/or language are included, as well as a few specialized general indexes, e.g., subject-indexes to journals. The subject catalogs of some libraries are included, as they are practically identical with general subject-indexes. Some of the works considered are manuscripts. The author also studies some plans for subject-indexes which never were actualized at all, some subject-indexes which never were completed, and some theoretical discussions on the methodology of the indexes in question. I do not understand why the author does not also take into consideration the basic works on biblioteconomy, in as far as they concern theoretical discussions on the classification of books, or provide classified lists of books to be used as a blueprint for organizing a library; in fact, the problems and the lists in question are identical to those belonging to a general subject-index, as one can see e.g., in the well-known writings on the subject by E. Edwards (1859), J. Petzhold (1866), A. Maire (1896), E. C. Richardson (1901), Berwick-Sayers (1954), etc.

This is an important contribution to the history of ideas from three points of view: first, because as a history of a branch of bibliography it studies a significant aspect of the development of the organization of learning; second, because it is in many cases a study of an aspect of the history of the systematization of knowledge, i.e., of the classification of the sciences and of their sections; third, because many of the works described are still very useful as bibliographical instruments for the scholars of our time. In fact, many of these works have not been superseded by more recent compilations, and are still basic sources of reference for some periods and areas. Professor Taylor's descriptions are frequently very helpful in determining their present utility although this is not the major aim of this book, the scope of which is first

and foremost historical.

I am listing here some titles which should be added to Professor Taylor's study, but I must warn the reader that as the index of names (*Compilers of Subject-Indexes and Kindred Works*) at the end of Professor Taylor's book only lists a few of the names actually mentioned in his work, it is possible that some of the titles in question are mentioned, but escaped my attention. All the works listed below, if they are not described as plans or theoretical discussions of a classification, are general subject-indexes ordered systematically, i.e., in none of them the basic organization is alphabetical, although their sub-sections may occasionally be ordered alphabetically. In many of them the classification merely consists in a few general headings, and under each heading the entries are listed alphabetically by the names of the authors." (p. 211)

11. ———. 1974. "Leibniz on Innate Ideas and the Early Reactions to the Publication of the "Nouveaux Essais" (1765)." *Journal of the History of Philosophy* no. 12:437-454.

Revised version of *Early Reactions to the Publication of Leibniz's "Nouveaux Essais"* (1972).

Italian translation in: G. Tonelli, *Da Leibniz a Kant. Saggi sul pensiero del Settecento*, Napoli: Prismi, 1987, pp. 111-136.

"Leibniz' *Nouveaux Essais*, written in 1703-1705 (cited hereafter as NE), were posthumously published by Raspe (1) in 1765, at the beginning of a Leibniz revival which was also marked by the large Dutens edition of 1768. As the great upheaval in Kant's thought took place in 1769, and as this upheaval had as one of its main characteristics the rejection of sensibility as the sole source of knowledge, (2) it is easy to infer that Kant's reading of the NE may have been one of the elements prompting him to adopt his new solution. It is not the ambition of this paper to answer that difficult question: rather it is an attempt towards clearing the ground for an answer to it, by inquiring into the early reactions of philosophical circles, especially German, to the appearance of the NE. To what extent was the significance of the particular doctrines expounded in the NE noticed? To what extent did contemporary philosophers realize that these were to profoundly modify the picture of Leibniz' psychological tenets? And, therefore, to what extent could Kant have been stimulated by a widespread reaction to pay special attention to the peculiarities of that work? In conformity with this purpose, I shall focus my research on the question of the origin of knowledge. As it is my task to reconstruct a general philosophical atmosphere, I will not confine my research to philosophic reactions prior to 1769, but will also take into consideration some attitudes of the following decade. As frequently happens in the history of ideas, the impact of a certain event may be noticed almost immediately after its occurrence, but the documentation of its effects may be available only after a certain delay. But they are nevertheless indicative of that prior impact. Before starting this enquiry, I shall: (1) point out the difference between the doctrine in question as it is expounded in the NE and as it appeared in the previously published works of Leibniz; (2) examine the interpretations of Leibniz' psychology prior to 1765, especially as represented in the version which was accepted by Wolff and incorporated into his system." (p. 437)

(1) *œuvres philosophiques latines et françaises du feu Mr. de Leibniz tirées de ses Manuscrits qui se conservent dans la Bibliothèque royale à Hanovre et publiées par M. Rud. Eric Raspe. Avec une préface de Mr. Kaestner; Professeur en mathématique à Göttingue* (Amsterdam et Leipzig, 1765).

(2) Tonelli, "Die Umwälzung von 1769 bei Kant," *Kant-Studien*, LIV (1963), 369 ff.

12. ———. 1974. "Kant's Ethics as Part of Metaphysics: A Possible Newtonian Suggestion? With Some Comments on Kant's "Dream of a Seer" " In *Philosophy and the Civilizing Arts. Essays Presented to Herbert W. Schneider*, edited by Walton, Craig and Anton, John P., 236-263. Athens: Ohio University Press.

Italian translation in: G. Tonelli, *Da Leibniz a Kant. Saggi sul pensiero del Settecento*, Napoli: Prismi, 1987, pp. 259-282.

"One of the most remarkable traits of Kant's system of philosophy is the fact that Ethics is classified as a part of Metaphysics, as it appears in the titles of two of Kant's major works: *The Foundation of the Metaphysics of Morals* and *Metaphysics of Morals*. It is just too bad that no commentator, as far as I know, ever stressed the importance of this fact, and of the underlying problems; the fact was taken for granted, the problem ignored. It is high time to call some attention to it.

Actually, this is one of the most dramatic changes Kant introduced into the structure of philosophy as a whole; before him, a subordination of Ethics to Metaphysics was, as far as I know, totally unheard of. Metaphysics had been subordinated to Ethics by Spinoza, probably under the influence of the later developments of Stoicism, but the opposite had never been attempted.

This of course does not mean that before Kant Ethics never had been founded on Metaphysics; on the contrary, this foundation of Ethics is certainly one of the most generally accepted positions. Nevertheless, Ethics had been considered all the same as an independent science, and not as a part of Metaphysics. On the other hand, if Kant considers Ethics as a part of Metaphysics, this does not mean that in his

thought the dependency of Ethics on Metaphysics is increased; on the contrary, Ethics becomes systematically totally independent of Metaphysics *stricto sensu*; but, as we shall see, it becomes a part of Metaphysics because it is transformed into a foundation of it, and this is quite new.

The expression “Metaphysics of Morals” (*Metaphysik der Sitten*) appears, as far as I know, for the first time in Kant’s letter to Herder of May 9, 1768, where Kant states that he is working on a Metaphysics of Morals which should be completed within that year. But, in a letter to Lambert of December 31, 1765, Kant had already announced a work on the “Metaphysical Foundations of Practical Philosophy.” The expression “Metaphysics of Morals” is repeated in Kant’s letter to Lambert of September 2, 1770, (1) where our author states that he is busy right then writing a treatise (which never was published) on that subject, without adding any further comments.

In the *Logik Blomberg* (1771) and in the *Logik Philippi* (1772), moral philosophy is not subordinated to the general heading of metaphysics. (2) In the *Metaphysik L1* (1775-1780), Metaphysics and Moral philosophy are said to be the two pure philosophical sciences, (3) and in the *Lectures on Ethics* of 1780-1781, philosophy is divided into theoretical and practical philosophy, (4) but a Metaphysics of Morals is not mentioned. In his lectures Kant frequently takes a more conservative stand than in his private correspondence, in his personal notes or in his published works.

In a letter to Herz, written towards the end of 1773, Kant announces a detailed plan for his own work: he intends to write a treatise on “transcendental philosophy,” which would be a *Critique of Pure Reason*; afterwards, he intends to publish a *Metaphysics*, which would be divided into a *Metaphysics of Nature* and a *Metaphysics of Morals*. The last one would appear first. (5)

Towards the end of the decade, in his lectures on *Philosophical Encyclopaedia* (1777-1780), (6) Kant expounds his new notion of ethics even in class. Practical philosophy should be divided, in his saying, into: (1) *transcendental practical philosophy*, dealing with the use of freedom in general; (2) *practical rational philosophy* viz. *Metaphysics of Morals*, dealing with the good use of freedom; (3) *practical anthropology*. (7) We need not consider (3) here, because this section clearly does not belong to pure philosophy. (8) As for (1), it is easy to identify it with that section or aspect of a *Critique of Pure Reason* which deals with the transcendental foundations of morality. (9) Therefore (2) corresponds to the *Metaphysics of Morals* properly.

It is well known that in the section on *Architectonic* of the *Critique of Pure Reason* metaphysics is divided into *Metaphysics of Nature* and *Metaphysics of Morals*. But Kant felt the need of adding a few words of explanation for a denomination so unusual:

The term ‘metaphysics,’ in its strict sense, is commonly reserved for the metaphysics of speculative reason. But as pure moral philosophy really forms part of this special branch of human and philosophical knowledge derived from pure reason, we shall retain for it the title ‘metaphysics’. (10)

Still, in the *Prolegomena* (1783), Metaphysics and Morals are mentioned separately. (11) But in a *Reflection* dated by Adickes in 1783-84, Metaphysics is divided again into Metaphysics of Nature and of Morals. (12) In the *Metaphysik Volckmann* (1784-85), Kant expands on this distinction. (13)

In 1785, the publication of the *Foundation of the Metaphysics of Morals* lends a final official character to this denomination, referring to a science belonging to pure philosophy in as far as this is limited to particular objects of the understanding. (14) The need for a special *Critique of Pure Practical Reason* is also acknowledged. (15)

The question, in fact, is settled from now on. In the later years, only after 1790, Morals is distinguished from Metaphysics in the division of the parts of a certain conception of philosophy in general, called “cosmopolitan,” which conception seems to have been unknown before, and which seems not to replace, but to flank, the older conception and division. (16) In fact, the established denomination reappears in the *Metaphysics of Morals* published in 1797. (pp. 236-240)

(1) I. Kant, *Gesammelte Schriften*, Akademie-Ausgabe (Berlin und Leipzig), X (2nd edition), pp. 74, 56 and 97. Professor Norbert Hinske called my attention to the letter of 1768, and to another letter from Hamann to Herder of February 16, 1767, where Hamann states: “Kant arbeitet an einer Metaphysik der Moral” (J. G. Hamann, *Briefwechsel*, Wiesbaden 1956, Vol. II, p. 390); in another letter to Herder of August 28, 1768, Hamann writes: “Kantens Metaphysik der Moral hält mich in Erwartung” (*ibid.*, p. 421).

(2) *Op. cit.*, XXIV, 1,1 pp. 31, 314.

(3) *Op. cit.*, XXVIII, 5,1, p. 173.

(4) I. Kant, *Eine Vorlesung Kants über Ethik*, hrsg. v. P. Menzer (Berlin, 1924), p. 1.

(5) Kant, *Ges. Schr.*, X, p. 145.

(6) For the correct datation, see my review of its edition, *Filosofia*, XIII (1962), pp. 511-514.

(7) I. Kant, *Vorlesungen über Enzyklopädie und Logik*, Bd. I, *Vorlesungen über Philosophische Enzyklopädie* (Berlin, 1961), p. 38. (This edition of Kant’s lectures, although published by the Berlin Academy, is not a part of the *Gesammelte Schriften*. This edition was discontinued after Vol. 1.)

Nevertheless, on p. 67, *Moral* and *Metaphysik* seem to be distinguished.

(8) See *ibid.*, p. 68.

(9) It is well known that Kant realized the need to write a *Critique of Practical Reason* only after 1781. The *Critique of Pure Reason* was supposed, at least until 1785, to take care of the transcendental

foundation of both the Metaphysics of Nature and the Metaphysics of Morals.

(10) B. 870. I quote the *Critique of Pure Reason* using the pagination of the second edition (B). Where the second edition (1787) does not conform to the first, that will be pointed out. For translation into English, I follow N. Kemp Smith.

(11) Kant, *Ges. Schr.*, IV, p. 363 (§60).

(12) *Op. cit.*, XVIII, pp. 284-85 (Refl. #5644).

(13) *Op. cit.*, XXVIII, 5,1, p. 364. On p. 362 a justification of sorts is given for the presence of metaphysics in ethics; but it cannot serve our purpose because, according to this justification, metaphysics is present in *all* rational sciences, including mathematics (p. 363).

(14) *Op. cit.*, IV, p. 388. Kant adds: "Auf solche Weise entspringt die Idee einer zweifachen Metaphysik, einer *Metaphysik der Natur* und einer *Metaphysik der Sitten*" (*ibid.*). But what precedes hardly can be considered a clear explanation of this conclusion.

(15) *Loc. cit.*, p. 391.

(16) The first appearance of this doctrine which can be dated with certitude is that in the *Metaphysik L2* of 1790-91 (*op. cit.*, XXVIII, 5, 2,1, pp. 532-33). The same notion of "cosmopolitan" philosophy reappears in the *Wiener Logik* of 1794-96 (*op. cit.*, XXIV, I, 2, pp. 798-99), but there is no division. This leads me to think that the section of the *Logik* J'dsche expounding the same doctrine, and giving the same division (*op. cit.*, IX, pp. 24-25), derives from the *Kollegheft* of 1790 which, along with another from 1782, was used by Jäsche to compile his text.

13. ———. 1974. "Pierre-Jacques Changeux and Scepticism in the French Enlightenment." *Studia leibnitiana* no. 55:106-126.

Reprinted in *Scepticism in the Enlightenment* (1997), pp. 51-68.

"In the year 1767 Pierre-Jacques Changeux published a work entitled *Traité des Extremes, ou des éléments de la science de la réalité* (Amsterdam, 2 vol.). In the "Avertissement" the author states that his work had been undertaken at first as an article commissioned by the *Encyclopédie*, but that it had expanded so much that it had not been finished in time (I, p. V). In fact, the volume of the *Encyclopédie* with the letter R had been published in 1765, and included an article "Réalité" which was completely insignificant, which had nothing to do with Changeux's ideas.

A summary of Changeux's books by Vallet was published in the *Encyclopédie d'Yverdon*, (1) under the heading of "Extrêmes" (vol. XVIII, 1772). At the end of the article more about Changeux's work was promised in an article "Réalité", but this article never was published (it should have appeared in vol. XXXVI, 1774). We do not know the reason for this omission, but it is quite possible that the dangerous character of Changeux's work had been noticed in the meanwhile, and that timid de Felice had preferred to suppress that article.

Vallet's article was reproduced in the *Supplément* of Diderot's *Encyclopédie* (Paris-Amsterdam 1776-77), and incorporated in the later editions of the *Encyclopédie*; but the new article "Réalité", still promised in Vallet's article did not appear." (pp. 106-107).

(...)

"In my opinion, Changeux's main work deserves some attention for two reasons. The first, and the most peculiar, is his notion of the " *Ex trêmes* "; the second is the fact that he is a rather typical (and comparatively late) representative of that major sceptical trend in French XVIIIth Century philosophy whose importance has been hitherto almost entirely ignored. Changeux's most peculiar thesis is that everything man is, or man can know, lies in the middle of two extremes, which are an infinity of magnitude and an infinity of smallness. All things, or their qualities, are extremes, in as far as they are extended or diminished as much as the imagination allows it (I, 1). The extremes are nothing but words expressing relationships (I. vi). In the present constitution of man, the extremes meet each other, without merging: and reality lies in the middle (I, vi, 8). The extremes are not only terms connected with relationships: they are relative to the different minds thinking them. They also correspond to infinity as applied to all kinds of knowledge - but infinity is conceived differently by the different men (I, vi, viii). The extremes do not contradict each other (I, 3-4): in fact, the universe subsists through an opposition of contraries (I, 9). The middle point (*milieu*) is the highest degree of reality (I, 14), although this middle point is not the same for all men (I, 17); there are infinite middle points which are only apparent (I, 18)." (p. 108)

(...)

"I will consider now the second basic aspect of Changeux's work, i.e., its scepticism, whose importance can be assessed only in connection with the general development of this school of thought in XVIIIth Century France. The only survey of Enlightenment scepticism we have is a well known article by R. H. Popkin (12), which provides a broad frame of reference, but which neglects many details. Using some research recently produced by other scholars, and adding some elements of my own, I will try to draw a very summary picture of XVIIIth Century French scepticism prior to Changeux. It will appear that scepticism was much more largely diffused in France in that time than it has been hitherto realized: so

much, that it is probably justified to consider it as the methodological trend by far dominating in that area. In comparison, German contemporary scepticism was an extremely limited phenomenon (13); as for British scepticism, although it was represented by high ranking personalities such as Hume and Bolingbroke, it does not seem to have mastered many other adepts (14)." (pp. 110-111)

(1) B. De Felice, *Encyclopédie, ou Dictionnaire universel raisonné des connaissances humaines*, 42 vol. Yverdon 1770-1775.

(12) R. H. Popkin, *Scepticism in the Enlightenment*, in: *Studies on Voltaire and the Eighteenth Century*, XXVI, 1963, pp. 1321 ff.

(13) See my essay, *Kant und die antiken Skeptiker*, in: *Studien zu Kant's philosophischer Entwicklung*, hrsg. v. H. Heimsoeth, Hildesheim 1967, p. 109 (and footnotes referred to it).

(14) I must remark for the sake of objectivity that my search of the British philosophy of that time was not as extensive by far as that of French and German philosophy, and so this side of the picture is not yet quite clear in my mind. But I suspect that a further inquiry would not significantly change the present perspective.

14. ———. 1974. "Lumières - Aufklärung: A Note on Semantics." *Studi internazionali di filosofia* no. 6:166-169.

"There are few periods in the intellectual history of the western world which were hypostatized more than the one called « Enlightenment ». Considering this era as a whole determined in time (1700 to 1800?) and in space (Central and Western Europe?) is an historical device whose use certainly was expedient in E. Cassirer's and P. Hazard's time, but which is quite inadequate now (1). It is very encouraging to notice that some of the best research workers are moving towards a more intensive, and less extensive inquiry in this field: such are for example Norbert Hinske and Frieder Löttsch (2).

But, to begin with, it is necessary to establish when the terms of « Lumières », « Aufklärung » (and their synonyms) appeared, and what they meant at that time. The general historical problems connected with « light » as a metaphor for « knowledge » were pointed at e.g., by H. Blumenberg almost two decades ago (3). But it is only recently that some precise answers to this question were given, not in general, but exactly in connection with the period in question: F. Schalk and R. Mortier provided the outline of a solid background for the French « Lumières » (4). Schalk's and Mortier's papers are extremely interesting and instructive: still, I think that another dimension of the problem should be explored (both for «Lumières» and «Aufklärung»): the connection between « light of nature » and « right reason », « universal reason », « good sense » and « common sense », expressions which were synonyms for centuries. Inquiring into this side of the question could possibly clarify the need for a further inquiry into the connection between what is traditionally called « Enlightenment » and what is called « Common Sense Philosophy »; a connection which would probably prove not to be entirely accidental (5).

Another obvious direction of expansion of the problem is the exploration of the connections between « lumières », « Aufklärung », and « The Age of Reason », « le siècle philosophique », « das kritische Jahrhundert », and other denominations of that era, in order to establish in how far they simply overlap, and in how far they reveal different aspects of that very complex phenomenon.

As for the German « Aufklärung », apart from the data offered also on this theme by Schalk in the paper mentioned above, some interesting elements are provided by Th. Mahlmann (6), and an even more thorough and important investigation was produced by Horst Stuke, in his article « Aufklärung », in *Geschichtliche Grundbegriffe* (7).

It is my intention to list here a few elements which might tentatively prove to be useful for gaining a more detailed view of the problems involved." (p. 166)

(1) I present the reason for my misgivings about the protracted use of this approach in my article: « The Weakness of Reason in the Age of Enlightenment », *Diderot Studies*, 1971, and in: « La philosophie allemande de Leibniz à Kant », in *Histoire de la Philosophie*, vol. II, ed. by Y. Belaval, Paris 1973.

(2) *Was ist Aufklärung? Beiträge aus der Berlinischen Monatsschrift*. In *Zusammenarbeit mit M. Albrecht ausgewählt, eingeleitet ...* von Norbert Hinske; F. Löttsch, « Zur Genealogie der Frage: Was ist Aufklärung?: Mendelssohn, Kant und die Neologie », in: *Theokratia*, 11, 1970-1972. See also: *Aufklärung (Volk und Wissen, volkseigener Verlag)*, Berlin 1971.

(3) H. Blumenberg, « Licht als Metapher der Wahrheit », *Studium Generale*, X, 1957.

(4) F. Schalk, « Zur Semantik von Aufklärung in Frankreich », *Festschrift W. v. Wartburg zum 80. Geburtstag*, hrsg. v. K. Baldinger, Tübingen 1968, vol. I; R. Mortier, « Lumière et lumières. Histoire d'une image et d'une idée », in: R. Mortier, *Clartés et ombres du siècle des Lumières*, Genève 1969.

(5) I will provide an outline of the history of this question in my article « Gesunder Verstand - Gesunde Vernunft », to be published in the *Historisches Wörterbuch der Philosophie*, hrsg. v. J. Ritter, Basel-Stuttgart. This article will offer further reference to studies in this field.

(6) In his article in the *Historisches Wörterbuch*, cit., vol. I, 1971, pp. 633-634, s.v. « Aufklärung ».

(7) *Geschichtliche Grundbegriffe. Historisches Lexikon zur politisch-sozialen Sprache in Deutschland*, hrsg. v. O. Brunner, W. Conze, R. Kosellek, vol. I, Stuttgart 1971, p. 243ff. Stuke promises to produce a

monograph entirely devoted to this subject.

15. ———. 1974. "More About General Subject Indexes." *Studi internazionali di filosofia* no. 5:185-186.

"In the last issue of this yearbook I published « A Contribution to the Bibliography of General Subject Indexes », dealing with works other than those studied by Archer Taylor in his book *General Subject - Indexes since 1548*, Philadelphia 1966.

The following are new additions to the same, according to the same criteria, collected by me during the last year, in particular at the Bibliothèque Nationale (Paris). I saw the works followed by the acrostic BN at the Bibliothèque Nationale." (p. 186)

16. ———. 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 menschlichen 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"*.

§ 7. *German classifications, 1753-1779*.

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

Étienne Bonnot de Condillac (1714-1780), *Cours d'études* (1775) dans *œuvres 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.]

17. ———. 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)

18. ———. 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.

19. ———. 1976. "Analysis and Synthesis in Xviii Century Philosophy Prior to Kant." *Archiv für Begriffsgeschichte* no. 20:178-213.

"I can not inquire here into the history of these notions, as prior to the XVIIIth Century, although the

knowledge of that history is essential in order to fully 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.

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'œuvre 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.

20. ———. 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 I: D'Alemberts Erkenntnislehre*, Straßburg 1914; A. Carrigós, *Juan d'Alembert, artifice de la filosofía 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.*, III, 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 Kongelige 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, Egoïsme, Élément 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.

21. ———. 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" (formerly "critick"), "critical" and "to criticize" were extremely fashionable ones, lavishly and promiscuously used. The same happened, e. g. with "reasonable" (*vernünftig*) 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 Concept of 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 general 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.

22. ———. 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 *Recherches Philosophiques* (3), a quite remarkable work, particularly for the considerable knowledge of ancient philosophy it shows, as well as of the philosophy of the XVIIIth 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.

23. ———. 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 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 géométriques*(Paris 1773).

To this late work Quesnay prefixed an introduction entitled *Examen des avantages de la géométrie 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 mathematical 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 this 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, *œuvres 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."

24. ———. 1994. *Kant's Critique of Pure Reason within the Tradition of Modern Logic. A Commentary on Its History* . Hildesheim: Georg Olms.

Edited from the Unpublished Works of Giorgio Tonelli by David Chandler.

"The world of Kant scholarship was electrified in 1974, when Giorgio Tonelli presented a brief summary of his life's work. His was a meticulous study: the plethora of sources shaping Kant's world, particularly the nature and scope of logic. 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 Jäsche *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)

25. 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 Materialien 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)

26. 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 far-reaching 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 sullo 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 filosofie*, Alphen a. d. Rijn, 1927 (Utrecht Dissertation).

(138) Compare Tonelli, "Die Anfänge von Kants Kritik der Kauzabeziehungen", *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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