Hermeneutic of Aquinas's Texts: Notes on the *Index Thomisticus*

Paolo Guietti

HERMENEUTIC OF AQUINAS'S TEXTS: NOTES ON THE *INDEX THOMISTICUS*

PAOLO GUIETTI

Università Cattolica Augustinianum
Milan, Italy

I. *Introduction: First Impressions of the* Index Thomisticus

UPON ENTERING an excellent library of philosophy, one cannot help but notice the 56 volumes of the *Index Thomisticus*.[1] Anyone with a scholarly interest in Saint

---

[1] *Index Thomisticus: Sancti Thomae Aquinatis Operum omnium Indices et concordantiae . . .* (Stuttgart: Frommann-Holzboog, 1974-1980). Reference to this work in notes takes the form: *IT* [section]—[vol.], [p.]. References to Aquinas's works will follow the conventions established by Busa in the *Index Thomisticus* (e.g., *ST1* = *Summa theologiae*, prima pars) and unless otherwise indicated are from the same texts processed in the *Index Thomisticus*. References to Roberto Busa's works will have the following abbreviations: *Clavis Indicis Thomistici: Clavis Indicis Thomistici* (Stuttgart: Frommann-Holtzboog, 1979). *Fond. informatica linguistica: Fondamenti di informatica linguistica* (Milan: Vita e Pensiero, 1987), (contains a bibliography of Busa's works through 1987). *Per San Tommaso 'ratio seminalis':* "Per San Tommaso 'ratio seminalis' significa 'codice genetico'. Problemi e metodi di lessicologia e lessicografia tomistiche," in *Atti dell'VIII congresso tomistico internazionale* (Vatican City: Libreria Editrice Vaticana, 1981), vol. 1. *L'Index Thomisticus:* "L'Index Thomisticus," in *Studi medievali,* III serie, XXI, I, 1980. *Informatica e filologia:* "Informatica e nuova filologia," in G. Savoca ed., *Lessicologia, filologia e critica* (Florence: Olschki, 1986), pp. 17-25. *L'originalité linguistique:* "L'originalité linguistique de S. Thomas d'Aquin," in *Archivum Latinitatis Medii Aevi (Bulletin du Cange),* Tome XLIV-XLV, fascicule double, 1985, pp. 65-90. *ORDO dans les ouevres:* "ORDO dans les ouevres de St. Thomas d'Aquin," in M. Fattori and M. Bianchi, eds., *ORDO II Colloquio internazionale del Lessico Intellettuale Europeo* (Rome: Edizioni dell'Ateneo e Bizzarri, 1979), pp. 59-184. *Voces REALIS-REALITER:* "Voces REALIS-REALITER in S. Thoma Aq. Cum appendice de voce 'res-rei'," in M. Fattori and M. Bianchi eds., *RES. III Colloquio internazionale del Lessico intellettuale Europeo* (Rome: Edizioni dell'Ateneo, 1982), pp. 104-

Thomas Aquinas will be drawn to employ the *Index Thomisticus* as a powerful concordance. But any reasonable scholar can recognize the disproportion between a desirable concordance and this hyperbolic system of about 70,000 pages. The *Index Thomisticus* is the second largest written work of this century, surpassed only by the *Encyclopedia Britannica*. The *Index Thomisticus* is a mountain of pages that classifies with a precision never before realized everything that came from Aquinas's pen in twenty-five years.[2] Is it not awkwardly disproportionate and too pedantically analytical for scholarly research?

Moreover, what would Aquinas think if, in a return to this life, he could see the electronic digestion of his work? A neo-scholastic Jesuit who devoted thirty-four years of his life to chopping and classifying even the most insignificant things, like " et " and " est," could seem to St. Thomas a modern computer-nut, i.e., a person who has lost his good sense in front of a screen.[3] Everyone understands the usefulness of a concordance; even St. Thomas wanted and used concordances.[4] But the *Index Thomis-*

136. *De voce SPIRITUS:* " De voce SPIRITUS in operibus S. Thomae Aquinatis," in M. Fattori and M. Bianchi, eds., *SPIRITUS. IV Colloquio Internazionale del Lessico Intellettuale Europeo* (Rome: Edizioni dell'Ateneo, 1983), pp. 191-222. *Thomistische Hermeneutik:* " Das Problem der thomistischen Hermeneutik nach der Veroeffentlichung des Index Thomisticus," in A. Zimmermann, ed., *Miscellanea Medievalia*, Bd 19: *Thomas von Aquin* (Berlin, New York: Walter de Gruyter, 1988), pp. 359-364. *L'Index Thomisticus per la filosofia:* " L'Index Thomisticus per la filosofia e la teologia," in *Teologia* 5, 1980, pp. 258-265. *Il logos principio di dialogo:* " Il logos principio di ogni dialogo tra persone secondo San Tommaso," in *Portare Cristo all'Uomo. Congresso del Ventennio dal Concilio Vaticano II* (Vatican City: Urbaniana University Press, 1985), pp. 577-584.

[2] I. e., 8,767,854 words. The *Index Thomisticus* classifies everything St. Thomas has probably written, everything St. Thomas erased (*Autographi deleta: Index Thomisticus:* 006 ADL) and even works of other chosen authors for comparison with St. Thomas.

[3] Roberto Busa, S.J., was born in Vicenza, Italy in 1913. He began to " play " with the computer in 1949. His major work in neoscholasticism is: *La terminologia tomistica dell'interiorita. Saggi di metodo per un'interpretazione della metafisica della presenza* (Milan: Bocca, 1949).

[4] See St. Thomas, *Tabula libri Ethicorum* in " Opera Omnia, Iussu Leonis XIII edita " (Leonine edition), tomus 48 (Rome, Ad. Sanctae Sabinae 1971), pp. B 63-B 158.

ticus is excessive. What is the purpose of this expenditure of human energy and time? Is it only for the satisfaction of completeness, of perfection? The *Index Thomisticus* is an *unicum* and a *monstrum* (in both the senses of a wonder and something deformed). We may not lament the *unicum*. But what would a library become if every author had an *Index* such as Aquinas has now?

The question " for what?" is a disoriented yet common and understandable reaction to this new instrument on which Roberto Busa has spent half of his life. Moreover, there are other characteristics which strike the common approacher of this *monstrum*. The *Index Thomisticus* looks both extremely advanced and primitive. The formal symbolization is so new that every·· one is disoriented by it. But in spite of this aspect of novelty, the language used in the *Index Thomisticus* is a dead language, Latin, which once was the language of culture, but today is the language of nostalgia. As a result of these two characteristics, the *Index Thomisticus* seems to come from other periods than the present: the future, the time in which the computer will make available every text with this kind of mathematical and electronic precision, and the past, the time in which scholars were able to communicate in Latin.

Furthermore, the *Index Thomisticus* is the most pedantic work ever written. The *Index Thomisticus* surpasses in precision and erudition any classification of human speech attempted before. It can spot every " et " or "ad " of St. Thomas. Busa avoided asking the question whether or not a word was relevant before classifying it.[5] In fact, Busa purposely did not ask the question " what is important?"[6] The original structure of every human

---

[5] The most common words like " et " are not excluded simply because they are judged unimportant. See the *tabulae* 33 and 34 in *IT* I–9, pp. 1205-1206 for a view of the frequency of these words in St. Thomas's work.

[6] " Ho giudicato che fosse importante rilevare e sistematizzare tutto quello che c'è, così com'è. In scienza pura tutto è per principio importante: si tratta di conoscere fatti e cose per quel che sono e per quel che contengono di categorie. All'opposto, un giudizio d'importanza non può non essere relativo a finalità specificate.[. . .] È la prima volta che un indice o concordanza documenta tutti gli *et*, i *non*, i *quam*, gli *est*, di un corpus di queste dimensioni " (*L'Index Thomisticus*, pp. 414-415).

language is present in the most common words. To choose to overlook these words is to choose to overlook the simplest yet deepest categories of thought and language. Busa explains why the outcome of this complete analysis is so complex: " The *Index Thomisticus* is a complex research documentation, which may prove at the outset to be laborious to use. There are two reasons for this. The first is the enormous quantity of data to be documented: 179 writings, 1,500,000 lines and 10,600,000 words. The second reason for the complexity of the *Index Thomisticus* is the complexity inherent in speech and language. In all verbal expressions there emerges a multitude of distinct, diverse, opposite, and complementary structures. Speech can be viewed as the merging of body and soul, where matter and spirit come together. In fact, reality consists of more than only tangible objects. Physical objects react only to present stimuli. Measurements of these interactions can be formulated in mathematical terms. On the contrary, human words show that: a) human thought also deals with non-present stimuli: unseen, possible, universal, formal objects . . .; b) the human mind also has instantaneous flashes and intuitions which are a simple mental operation, by which it masters a multitude of different objects in a system which derives its unity from its goal . . .; c) the mind has the power of creative freedom to select among the many beautiful and appealing possibilities which it is able to imagine." [7]

After these remarks, we can consider the position of someone who for whatever reason wants to read Aquinas. This reader could ignore the *Index Thomisticus* altogether. Since the dimensions are so enormous, he could avoid it with the justification that it is important for linguistics and research in medieval language, but not for understanding Aquinas. He could use it at most as an oversized concordance. However, the general opinion would be that to understand St. Thomas one must read St. Thomas directly, not an electronic pulverization of what he has written, just as to understand a man you must look at the whole, and not at his atomic composition: 65% Oxygen, 20% Hydrogen, 12% Carbon, etc.

---

[7] *Clavis Indicis Thomistici*, p. 7.

Nevertheless, if one's curiosity is provoked by this huge expenditure of energy, one should try to understand whether the electronic precision of Busa can have any use in the hermeneutics of Aquinas. The *Index Thomisticus* is a linguistic instrument. Really to understand any instrument one must be able to use it, and in order to be able to use the instrument, one must use it. *Ab esse ad posse datur illatio.* The best way to understand the *Index Thomisticus* is to examine carefully its hermeneutical use, looking at someone who has used it (besides reading the instructions, of course).[8] It is not hard to imagine that in the next decades instruments like the *Index Thomisticus* will be made available for many philosophers. An interest in the *Index Thomisticus,* therefore, goes beyond an interest in St. Thomas. It is an interest in what will succeed the birth and childhood of the computer in the humanities: a jump in the techniques of the academy.

II. *An Overview of the Structure of the* Index Thomisticus

A synthetic view of the *Index Thomisticus* is the first thing required. The *Index Thomisticus* consists of 56 volumes of more than 1000 pages each.[9] Properly, the *Index Thomisticus* comprises 49 volumes, with 7 supplemental volumes which reproduce the electronic texts used in the *Index Thomisticus.*[10] The *Index Thomisticus* is divided into three sections:

SECTIO PRIMA (10 vols.) :

Indices

Prospectus distributionis [11]

Singillata distributio[12]

Systemata lexici [13]

[8] *Clavis Indicis Thomistici.* A volume of introduction is forthcoming. For the moment, *Clavis Indicis Thomistici* may be considered an introduction to the *Index Thomisticus.*

[9] The *Index Thomisticus* is available on 300 magnetic tapes (density 800 bpi). Soon it will be available on optic disk.

[10] See below.

[11] Published in 1976.

[12] Published in 1976.

[13] Published in 1980.

SECTIO SECUNDA (23 + 8 vols.) :

Concordantiae operum thomisticorum:

Concordantia prima [14]

Concordantia altera [15]

SECTIO TERTIA (6 + 2 vols.) :

Concordantiae operum aliarum auctorum [16]

Concordantia prima

Concordantia altera

The first section is the strangest and apparently most useless section of the *Index Thomisticus*. It consists of tables of symbols and numbers not immediately decipherable. This is a work of pure linguistics, and one must understand its usefulness within this horizon. A cardinal distinction for understanding the system of the *Indices* (and the concordances, too) is the linguistic distinction between *lemma* and *form*. Everyone makes use of this linguistic distinction in speaking and writing, yet few can say what it is. Busa explains it in this way: " We call a lemma a lexical unit, i.e., the words which in a dictionary represent all their possible flections and signify that basic meaning which is common to all. For instance, ' am, are, was, being ' are forms of the verb ' to be.' " [17] The four largest *Indices,* tables of distribution, are organized upon two distinctions: a) *lemma-form* and b) general *prospectus* and one–by–one view.[18] The first eight

---

[14] Published in 1974-75.

[15] Published in 1980.

[16] Published in 1980.

[17] R. Busa, *CAEL Newsletter,* Dec. 1988 (trans. M. Dunne). Also: " Lemma: titulus paradigmatis, exprimens unitatem lexicalem vocabuli quod flexiones habet; v.g. *sum* est lemma cuis formae sunt *sum . . . est . . . fui . . . fuisti . . . ens . . .,* etc. Forma: typus vocabuli prout scriptum iacet . . ." (*IT* II-1, p. IX. Microglossarium). " The difference and distinction between lemma and form belongs to those structures of our speaking ability which everyone exercises, i.e. knows *in actu exercito,* but to which only a few people give conscious and deliberate attention *in actu signato.*" *Clavis Indicis Thomistici,* p. 19. See also *Informatica e filologia,* p. 19,

[18] The *prospectus-singillatim.*

volumes of the *Index Thomisticus* contain tables arising from this fourfold distinction. The tables of the last two volumes of the first section are based upon other concepts and oriented towards different problems. For instance, there are tables of graphical variations, of homography,[19] of the forms printed in alphabetical order of the inverted word, and of quantity.[20] This appears to be the most maniacal part of the *Index Thomisticus*. Busa's fantasy and the computer seem to be out of control. The question " what for? ", however, is misplaced: the usefulness of these tables becomes apparent in working with the *Index Thomisticus*. Asking " what for? " beforehand is like judging all the Chinese material in a library to be useless simply because one is not able to read it.

The second section consists of 31 volumes. This is the best known and most used section of the *Index Thomisticus* (at least the 23 volumes of *Concordantia prima*). They were the first to be published, and they can be used as a simple concordance of all St. Thomas's works. This is the best system of concordance ever produced. A rapid glance shows its logical completeness and pleasing aesthetic presentation. The difference between *Concordantia prima* and *Concordantia altera* lies in the way in which the words are presented. In the former, every word is given in its whole context, while in the latter, every entry consists of only three words. All except 1654 of St. Thomas's words are present in *Concordantia prima*.[21] The remaining words are to be found in the *concordantia altera*.[22]

The third section consists of only 8 volumes. This section is a classification of 61 texts of other medieval Latin works. The primary purpose of this section is to make possible a comparison

[19] " I call the forms which are spelled identically but belong to different lemmas, homographs." *Clavis Indicis Thomistici*, p. 23.

[20] A panoramic structure of these ten volumes is given in the insert to volumes 9 and 10: *Index Indicum*.

[21] *IT* II-1, p. X.

[22] The reason for this is either the excessive frequency of certain words or their presence in quotations or citations. The table of Indices shows where the word is to be found. For a complete and detailed explanation of the distribution in *Concordantia altera* (2nd to 5th concordances), see IT II-1, p. IX.

with St. Thomas's language. Section III is structured exactly like section II. Many of the indexed works are works which St. Thomas left incomplete and which were finished by other "Thomists." However, other words indexed also include texts by Albert the Great, Giles of Rome, Cajetan, Thomas Sutton, etc.[23]

The supplement consists of 7 volumes with all the texts processed in the *Index Thomisticus*. They are the most rapid way to check a reference in St. Thomas's text.[24] This edition of St. Thomas's *Opera Omnia* is the most compact available: all works are compressed in to 4500 pages. St. Thomas's text is offered in a form which is not very easy to read but is extremely useful for reference. Lastly, the texts used are from the most recent (and, when available, the critical) edition of St. Thomas's works.[25] The list of them can be found at the beginning of any of the 49 volumes of the *Index Thomisticus*.

The *Index Thomisticus* is primarily a work in computational linguistics.[26] It is the most daring use of the computer in the Humanities to date, if for no other reason than the amount of paper consumed by the work. The *Index Thomisticus* is a tool for studying not only the language of St. Thomas, but also—in levels of ascending generality—scholastic Latin and medieval Latin.[27] This linguistic instrument is useful in philosophy for two reasons. First, because the texts processed have philosophical-theological value, the material analyzed so minutely becomes available for dealing with many problems in St. Thomas. It is a powerful lens which allows one to discover things too small to be seen in an

---

[23] For the complete list see *IT* I-1, p. XV-XVI. See also *L'Index Thomisticus*, pp. 412-414.

[24] The last volume is for *Alii Auctores*.

[25] Considering how hard it is to obtain certain editions of St. Thomas's works, these 6 + 1 volumes of supplement render another great service.

[26] " L'Index Thomisticus per i suoi risultati, finalità e materiali è anzitutto un'opera di linguistica generale " (*L'Index Thomisticus,* p. 418).

[27] For the distinction of these three different levels and an introduction to each of them see M. D. Chenu, *Introduction à l'étude de saint Thomas d'Aquin* (Montreal: Institut d'Etudes Medievales, 1950), pp. 84-105.

ordinary reading or too numerous to be considered systematical-
ly. Thus, it offers the raw material to deal with hermeneutical
problems in reading St. Thomas. Secondly, the *Index Thomist-
icus* provides a large amount of material for elaborating a philos-
ophy of language, i.e., for understanding language as such.[28]

III. *The Novelty of the* Index Thomisticus

In the *Index Thomisticus* texts are treated in a novel analytical
way. Roberto Busa is not the first to discover that language is
a compound of atoms which can be examined with electronic ma-
chines. Neither is he the first to analyze the laws of composition
of these atomic-words. But he is the first and, until now, the
only one who has taken a system, a product of human thought,
and has produced a disintegration of such scientific precision.

Just as a chemist gives the formula of a compound, elements
in percentage, and the spectrographic analysis, so the *Index
Thomisticus* gives elements and percentages of that peculiar
compound of ink or bits which is St. Thomas's *Opera Omnia.*
Busa, who is aware of his position as a pioneer, writes: " This
manual is the outcome of 40 years of computational linguistics,
like the geographical map of a new region which an explorer has
measured first." [29] The most striking aspect of this work is the
fact that Busa discovered a new method. This method is not con-
fined to an analysis of St. Thomas. Soon we may hope to have
similar instruments for Aristotle, Plato, Augustine, Kant, etc.
without having to multiply space in libraries. These indexes can
use a different " support ": not heavy and cumbersome paper,
but optic disks.

Continuing the analogy with physics and chemistry, the

---

[28] Many drafts of such a philosophy of language are offered *passim* by Busa:
" le point de départ de la philosophie est l'analyse réflexive du language com-
mun à tout l'homme, au fond duquel on trouve la logique de l'être " (*L'orig-
inalité linguistique,* p. 78) ; Cf. *L'Index Thomisticus per la filosofia,* pp. 258-
265.

[29] *Fond. informatica linguistica,* p. 13 (my translation).

strange-looking first volumes of the *Index Thomisticus* can be compared to Mendeleev's table of elements. Computational linguistics is to language what the atomic theory is to physics. The lemmas and the forms are the analogues of atoms in the field of linguistic expression. Lemmas and forms are the smallest parts of speech with meaning. Mendeleev's table of elements is not comparable to the alphabet because letters are not *per se* parts with meanings. For the written text of St. Thomas, the *Singillata distributio lemmatum,* the distribution of the lemmas one by one, constitutes the analogous reduction. The *Index Thomisticus* is the *ana-tomization* of St. Thomas's text just as *atomic* Physics is the *ana-tomization* of nature.

The language in the first part of the *Index Thomisticus* is reduced to its elementary morphology just as physics renders the elementary morphology of experienced reality.[30] To reduce St. Thomas's text to the *Index Thomisticus* is to understand nothing, just as to reduce nature to atoms is to understand nothing. Things arise from the infinite numbers of possibilities of combinations of elements, but they are not reducible to the elements. Moreover, what really exists are the compounds, while the elements are a scientific abstraction depending on existing reality. If the compound is not reducible to the elements, neither is the composition. The composition—including the law of composition, the architectonic, and the relationships among the elements—is irreducible to the elements of the sentence.[31]

In the introduction to the *lexicological system* in *Index Thom-*

[30] The isotopes and the ionized form of atoms are the analogues of the form in *Index Thomisticus,* while the basic form of atoms corresponds to the lemmas.

[31] " As regards that which is compounded out of something so that the whole is one—not like a heap, however, but like a syllable is not its elements, *ba* is not the same as *b* and *a,* nor is flesh fire and earth; for when they are dissolved the wholes, i.e. the flesh and the syllable, no longer exist, but the elements of the syllable exist, and so do fire and earth. The syllable, then is something—not only its elements (the vowel and the consonant) but also something else." Aristotle, *Met.,* VII, 17, 1041 b, in *The Complete Works of Aristotle,* ed. by J. Barnes (Princeton: Princeton University Press, 1983), vol. 2, p. 1644. See *Informatica e Filologia,* p. 20.

isticus, Busa writes: " Our system is integral, exhaustive, and complete, meaning that it offers all words without any exception, numbered as far as the last units and classified in such a way that no index or concordance has ever done before. However, one who would affirm that nothing is to be systematically defined would be mistaken: I think that researches on human speech are more inexhaustible, so to speak, than physical or biological researches." [32] The complexity and the simplicity of language (even the small fragment of all spoken and written words that is the entire Thomistic corpus) is the complexity and simplicity of reality. Millions of words can be classified by a computer, but their order is beyond the complexity of any software: it exhibits the simplicity of intelligence. What exists is not words or elements, but simple units, sentences and subsentences, which are yet extremely complicated when anatomized.

IV. *Working on Aquinas with the* Index Thomisticus

There are many possible ways to exploit this linguistic instrument. Before sketching the hermeneutical use of the *Index Thomisticus* as elaborated by Busa, some examples of different possible uses are noted. All these uses exploit primarily the fact that the *Index Thomisticus* is a complete concordance of St. Thomas's corpus. Inos Biffi uses the *Index Thomisticus* to locate and examine all the occurrences of the lemma *metaphysicus.*[33] William Wallace examines the lemma *suppositio* and particularly the syntagma *ex suppositione,* proving a linguistic and a conceptual continuity between medieval science, represented by St. Thomas's use of this language and concept, and empirical-modern science, represented by Galileo's use of the same language and

[32] *IT* I-9, p. XIV, n.2 (my translation).

[33] I. Biffo, " Il lemma *metaphysicus* in san Tommaso d'Aquino," in *Teologia,* pp. 85-107 (English summary p. 107). In another article—" Per un'analisi semantica dei lemmi ' theologia,' ' theologus,' ' theologizo ' in san Tommaso: un saggio metodologico nell'uso del " Index Thomisticus," in *Teologia,* 3, 1978, pp. 148-163—Biffi follows the pattern of a hermeneutical research to a greater degree.

concept.[34] Laura Landen, recensing all the occurrences of terms like *complexio* and *elementum,* sheds new light—from St. Thomas's biological language—on the well known Thomistic thesis of the unicity of the substantial form.[35] Enzo Portalupi documents the influence of Gregory the Great on the young St. Thomas, collecting all the quotations of Gregory the Great in the *Quaestiones Disputatae De Veritate.*[36] With a more lexico-graphical intention and method, Riccardo Quinto[37] analyzes the words *timor* and *timiditas,* exemplifying also the lexicographic process invented by Busa.[38]

Before sketching the moments of a hermeneutical analysis with the *Index* it is necessary to counteract the widespread idea that the use of a computer shortens the time involved in developing an interpretation. The computer, rather, makes this process longer, but much more precise and complete. The *Index Thomisticus* creates the need for a greater amount of time for hermeneutical research. The time necessary for research is " by its nature and without possible remedies the true remarkable defect of the *Index Thomisticus* (defect . . . by excess!) : The *Index Thomisticus* is neither a lexicon nor a florilegium ready to hand for rapid con-sultation, but a document for systematic researches." [39]

[34] Unpublished paper presented at the XIX International Congress on Medieval Studies, Kalamazoo, MI, 1984. See W. Wallace, " Galileo and Rea-soning *Ex Suppositione:* The Methodology of The Two New Sciences " in *Proceedings of the 1974 Biennial Meeting of the Philosophy of Science Asso-ciation,* ed. by R. S. Cohen et al. (Dordrecht and Boston: D. Reidel, 1976), pp. 79-104.

[35] Idem. See L. Landen, " Thomas Aquinas and the Dynamism of Natural Substances " (Dissertation, Washington D.C.: The Catholic University of America, 1985).

[36] E. Portalupi, " Gregorio Magno nelle Quaestiones Disputates De Veritate di Tommaso d'Aquino, in *Rivista di filosofia neoscolastica* 78, 1985, pp. 556-598.

[37] R. Quinto, " ' Timor ' e ' Timiditas.' Note di lessicografia tomista," in *Rivista di filosofia neoscolastica* 78, 1985, pp. 387-410.

[38] For more examples of use of *Index Thomisticus* see *Thomistische Her-meneutik,* p. 364.

[39] *Per S. Tommaso ' ratio seminalis '* p. 448. " When someone has an im-mediate need to know what St. Thomas wrote about a specific point of doc-trine and does not have the time to research scientifically into which words are

The first moment of the analysis is the *lexicological analysis*. Once the lemma corresponding to the concept to be studied has been determined, i.e., the key-word, the " family " of the lemma has to be measured and classified. The family of a lemma is composed of all those lemmas which share the same radical stem, or which are lexicologically related. In this way one can begin to identify the *notional area* of the key-word. The notional area or semantic field does not necessarily have the same verbal root. This notional field, however, has to be measured in lexicological terms: classified by numbers, occurrences, etc., either in proper texts or in quotations. Before the second step, one must notice that the problem of a Thomistic lexicology in general can be stated in this way: " How many and what sort of words did St. Thomas use? How does one describe the system, both by typology and by quantity? " [40]

The second moment consists in the proximate preparation to *lexicographic analysis*. All the contexts selected are read one by one.[41] It goes without saying that certain contexts are extremely prominent: those, for instance, where the key-word is not just used but also *defined*.[42] This lexicographic moment of the analysis, however, still deals with the word itself in its *use*, with the word *in actu exercito*. The most elaborate part of the hermeneutical work consists in this analysis. First, it is very important to identify the other words with which the key-word is associated: as

used by St. Thomas in expressing it, he is advised not to apply to the *Index Thomisticus* but to an *index realis*, i.e., subject index of St. Thomas, like the *Tabula Aurea* of Petrus of Bergamo, the *Indices Leonini* vol. XVI and L. Schuetz's *Thomas Lexikon*" (*Clavis Indicis Thomistici*, p. 10).

[40] *Per S. Tommaso 'ratio seminalis'*, p. 445. L. Bataillon, in a short paper with the title " The *Index Thomisticus* and Leonine Editions " for the XIX International Congress on Medieval Studies (Kalamazoo, Mich., 1984) gives examples of the lexicological usefulness of the *Index Thomisticus*, limited to the ongoing production of critical editions of St. Thomas.

[41] Criteria of selection, of limitation, differ according to the goal and the available time for research. One can restrict a search to the context of the key-word, avoiding the contexts of words of the lexicological family and of the notional field. Other possible restrictions: only to certain works, only uses outside of quotations, etc. See for this *Clavis Indicis Thomistici*, pp. 16-18.

[42] See the example for *metaphora*, in *Clavis Indicis Thomistici*, p. 18.

synonyms, antonyms, comparisons, etc. Then, examining the grammatical correlations, one determines which words are associated with it as adjectives (predicative or attributive), which words are associated as specifications (genitive), or which words the key-word specifies, etc. Finally, one determines for which verbs the word is the subject or the object of action. This process is the very anatomy of the key-word. It shows a myriad of different links and connections. It is like the examination of a cell under a microscope.[43]

" Writing the lexicographic voice is the last step. It is a spiritual work of intuitive and synthetical interpretation. It would be science fiction thinking that a computer would be able to accomplish it." [44] All the analytical work here finds its synthesis. In this process thought and word, in-tuition and ex-pression, find their identity again. To write the lexicographic voice is to reach the *mens auctoris* and its *Aus-legung,* ex-position. For example, one sees that when St. Thomas wrote *ratio ordinis,* he was not thinking of what we think when we say " the reason of order," but of something closer to what we think in saying " rational plan, program." [45] Likewise with *ratio boni*: not (only) " the reason of good," but " value."

The lexicographic analysis has as its final goal the compilation of a new Thomistic lexicon.[46] This lexicon will make possible the passage between signs belonging to two different systems. The lexicon will be a bridge, moreover, not just for signs, but for thoughts. This hermeneutical project is very ambitious and requires the *sacrifice* of confidence in an acquired jargon, or better, requires that the jargon, in this case the medievalist jargon, be presented as such, which may not be related essentially to what

----

[43] Examples of this patient analysis are presented in the quoted articles: *ORDO dans les oeuvres, De voce SPIRITUS,* and *Voces REALIS- Realiter.*

[44] *Per S. Tommaso ' ratio seminalis ',* p. 450.

[45] *Per S. Tommaso ' ratio seminalis ',* p. 447.

[46] " This was mainly the reason why I wanted to prepare the *Index Thomisticus.* I maintained that St. Thomas's vocabulary should be translated prior to his texts. In fact, linguistic evolution progresses at a far greater speed than the evolution of species " (*Clavis Indicis Thomistici,* p. 14).

is said and often proves misleading. Thought cannot be mummi-
fied in words: because it is act, thought is dynamic and living.
The project of a new Thomistic lexicon is not just an invitation
to a linguistic party. It is an invitation to thinking: an invitation
to discover philosophy and not just history in the *history of
philosophy*. It is an invitation to depart from the safe ghetto of
two kinds of repetitions: that of the historicist and that of the
paleo-scholastic. For the former, time is *everything,* while for the
latter, time is *nothing*. For Busa's hermeneutical project, time
is *something*.[47] Therefore, the *Index Thomisticus* is a philosoph-
ical project of the " consciousness of the work of time." [48]

V. *Anti-Historicism without Forgetting Time and History: The Example of* Ratio Seminalis

In reading St. Thomas, like reading anyone else, there is a
communication between two intelligences, remote in time, space,
environment, and language. This communication is made possible
by signs, written words, and sentences which convey a meaning
It is practically impossible that the same signs could have the
same meanings after seven centuries of human speech and of
human history. This is the hermeneutical problem: the reader's
mind and the writer's mind are not reading the same thing, al-

[47] There is another hermeneutical process altogether different from the pa-
tient analysis of the *Index Thomisticus*. This method is a synthetic one (see
Thomistische Hermeneutik, p. 360). In order to understand only one word,
one has to read the entire corpus. This synthetical approach is certainly more
fundamental. But even if *the method looks to the whole,* it does not mean that
studying the fragment is worthless. To inquire into the fragments as if the
whole were just the mere sum of the fragments is to have lost sense of reality.
Inquiry into the fragments *qua* fragments manifests again the primacy of the
whole. As anatomy can be extremely useful to physiology, so the anatomy of
the text in its words can be useful for understanding the text.

[48] So J. Grondin proposes to translate Gadamer's syntagm " Wirkungs-
geschichtliches Bewusstsein " (*Wahrheit und Methode,* II, II, 3). See J.
Grondin, " La conscience du travail de l'histoire et le problème de la verité
en herméneutique," in *Archives de Philosophie* 44, 1981, pp. 435-453. In any
case, the finest merit of historiographical hermeneutic is the *disclosure of
time,* i.e., the time which separates reader and writer. It is an *ex-position*
and thereby discloses consciousness of the work of history.

though the sign is the same sign. The same sign, for instance, *ratio seminalis,* does not have the same meaning in the two minds.[49]

The first, but still rudimentary, solution of this hermeneutical problem regarding St. Thomas is the literal translation. The text is simply given in a modern language. *Ratio seminalis* is thus translated by ' seminal reason ' or ' seminal virtue.'

Et ideo convenienter Augustinus omnes virtutes activas et passivas quae sunt principia generationum et motuum naturalium seminales rationes vocat.[50]	Thus Augustine aptly termed seminal virtues all those active and passive powers that are the originative sources of the coming into being of natural things and of their changings.[51]

" Seminal virtues " (reasons) has practically no meaning for any modern mind. This reflects a weakness of the translator, but neither the text by itself nor such a translation of it can overcome this difference.[52] Another way to make the difference less puzzling is an historiographical approach. In this way, *ratio seminalis* is understood in its historical settings, as a Stoic concept inherited by St. Thomas through the influence of St. Augustine, and so on : quotations and citations of Marcus Aurelius, Plutarch, Philo, and Plotinus, as origins of the concept for St. Augustine and St. Thomas, can be multiplied. While bringing the historical meaning of the concept closer, this approach makes the philosophical meaning more remote.

The *Index Thomisticus* makes available the horizon of the same word every time it has been used, i.e., written. The effort of

---

[49] *Per San Tommaso ' ratio seminalis ',* p. 448.

[50] *ST* 1, q. 115, a. 2 c.

[51] Ibid. Quoted in Blackfriars edition. One should consult the essay on ' Seminal Reason ' by W. A. Wallace, in Vol. 10, appendix 6, pp. 197-198 of the Blackfriars edition of the *Summa Theologiae* as well.
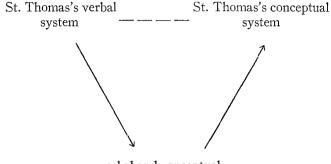
[52] " On perdra par là, heureusement, la facilité macaronique de traduire les discours de St. Thomas, tout simplement en manipulant les désinences, la graphie et parfois l'ordre de ses mots. Traduire un texte d'autrui implique de remonter de son discours à ses concepts et de réexprimer ces mêmes concepts avec nos mots d'aujourd'hui, même s'ils son différents : en effet dans un auteur ancien, plusieurs mots peuvent avoir des contenus sémantique que nous ne leur attribuons plus aujourd'hui " in *L'originalité linguistique,* p. 88.

comprehension is to try to understand in one's own *conceptual system* a different *conceptual system,* and to do so through a *verbal system* that is not coincident with the way its expression appears to us. The common system of signs, the written words, is neither common nor immediately communicative. The *hermeneutical* process can be represented with a triangle.[53]

St. Thomas's verbal   St. Thomas's conceptual
        system   — — — —   system

verbal and conceptual
system of St. Thomas's reader

This triangle avoids the possible reduction of concepts to words (verbal system to conceptual system), and expresses the necessity of a passage through the reader's conceptual and verbal system in order to understand a simple text.

A word like *ratio seminalis,* therefore, has two different meanings, one in St. Thomas's mind and one in the reader's mind. Translating *ratio seminalis* by ' seminal virtue ' or ' reason ' gives the text an oldness and an inadequacy which originally it did not have. To read *ratio seminalis* by giving the word a historical meaning, i.e., furnishing it with a set of historical sources and influences, is to *meta-interpret* the text. Furthermore, when the historical apparatus obstructs the comprehension, this leads the reader to *mis-interpret* the text.

[53] *Thomistische Hermeneutik,* pp. 359-360; *Per S. Tommaso ' ratio seminalis',* p. 444; *L'Index Thomisticus,* p. 414.

A rigorous lexicographic analysis [54] of the word shows that St. Thomas uses the word *ratio seminalis* to mean something similar to what we mean by ' genetic code,' or the original set of information. The word *ratio* has the meaning of program, plan, or organized set of information. The word *seminalis,* the adjectival form of *semen,* has to be understood as ' genetic.' *Rationes seminales* should be understood as those programmed codes which are at work in the ordered development of a living being. The repetition of these programs, from living being to living being, is reproduction. According to St. Thomas, there are four different modes in which these biological routines or genetic programs work: first, in the beginning phases of every living being; second, in the mature living being insofar as it is able to reproduce this information; third, in the beginning of all processes of reproduction, *genesis,* as a condition of possibility of an order; fourth, but fundamentally, in the mind of the programmer of life.[55] This does not mean that St. Thomas had our notion of *genetic code* or that he is the father of genetics, but that in using this expression to explain the living world he means something similar to what we mean when speaking of genetic codes.

One may criticize this approach by saying that it lacks historical sense. ' Genetic code ' is not *ratio seminalis,* one might argue, for there are seven centuries of history of scientific effort in between. This goes without saying. The problem is instead: how can we judge the *past* from a point of time that is itself going to be the *past* in a few years? Why should the truth be ' genetic code ' and not *ratio seminalis* if in one hundred years another expression, ' x ', will replace ' genetic code ' as inadequate? In reading an author of the past we have to remember that we ourselves are going to be what he is: *past.* With the measure by which we measure, we are to be measured. What is more, we are already measuring ourselves and the value of our opinions. If scientific-philosophical paradigms were without any continuity,

[54] Analysis of *seminalis* made by I. Sztrilich. See *Per S. Tommaso ' ratio seminalis',* p. 442.

[55] *ST* 1, q. 115, a. 2; *Per S. Tommaso ' ratio seminalis ',* p. 442-443.

then any paradigm would have as justification only the fact of being the most recent.

Another objection rises from certain fields of specialization in medieval philosophy. The effort to overcome the difficulties in the comprehension of a text (cultural settings, chronologies, styles, influences) leads to forgetfulness of the value of the text itself. One can spend a lifetime on these texts and be incapable of remembering why they are still so interesting. This fear of thinking is a mortal disease in philosophy. It is comparable to the fear of Cremonini, who used to say " De Aristotele dicimus, non de re ipsa." [56] The " archeological " effort to disclose certain texts, an effort worthy of a great reconnaissance, must remember that those texts and words coming from centuries past have meanings. And the worth of archeological efforts depends upon this: the more current these texts are the more valuable it is to " discover " them. This is assuming, of course, that someone from the past can say something that we do not know, i.e., that it is not true that the last to speak is the one who is right.

Busa remarks that he has not yet found a word in St. Thomas which has not undergone a process of modification in its meaning. Indeed, history does nothing in vain. The meaning of the word *ordo,* for instance, a word used very often by St. Thomas, has been specified by many other words, and simply translating *ordo* by ' order ' loses the semanticity of the word in St. Thomas. Therefore, *ordo* can mean in St. Thomas (according to the different contexts in which it is used) what we mean by ' organization ', ' system ', ' classification ', ' hierarchy ', ' taxonomy ', etc.[57] Likewise, the word *virtus* has a notional value much more extensive than the word ' virtue '. Moreover, in English the word ' virtue ' has almost completely lost its dynamical connotation. For St. Thomas, *virtus* means force, energy, power, dynamism, capacity, ability, efficacy, etc. An expression like *virtus fidei,* for instance, would be better translated " power of faith." [58]

[56] As quoted by F. Olgiati, *L'anima dell'umanesimo e del Rinascimento* (Milan: Vita e Pensiero, 1924), p. 576.

[57] *ORDO dans les oeuvres,* p. 60.

[58] *L'originalité linguistique,* p. 75. See also *Voces REALIS-REALITER; De voce SPIRITUS.*

This effort to go beyond a thoughtless reading to understand signs truly is the hermeneutical attitude. And this hermeneutical attitude is what philosophy and theology are all about: " One of my teachers, Father Carlo Giacon, S.J., attributed to St. Thomas the originality of having made the distinction between theology and philosophy. I want to add to this a paradox: while for St. Thomas theology is the hermeneutic of the human and historical discourses by which God disclosed the mystery of salvation, philosophy is the hermeneutic of that exclusive language of God of which things are the words (*solus Deus potest creare*), i.e., philosophy is the hermeneutic of being and of the beings. St. Thomas realized that, for all of us, all discourse is but a fragment of a hermeneutic of being." [59]

[59] " Un des mes maîtres, le R. P. Carlo Giacon, S.J. attribuait à St. Thomas l'originalité d'avoir distingué philosophie et théologie. Moi j'y ajoute un paradoxe: la théologie étant l'herméneutique des discours humains et historiques avec lesquels Dieu a révélé les mystères du salut, pour St. Thomas la philosophie est l'herméneutique de cette langue exclusive de Dieu, dont les mots sont les choses (*solus Deus potest creare*), c'est-à-dire l'herméneutique de l'être et des êtres. St. Thomas s'est rendu compte que, pour nous tous, tout discours n'est qu'un fragment d'une herméneutique de l'être " [*L'originalité linguistique*, p. 78 (my translation)].