# Database of Latin Dictionaries

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Dictionnaire du Latin Médiéval

under the direction of Paul Tombeur

USER'S GUIDE

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## Lexicon totius latinitatis

cum appendicibus Aeg. Forcellini, Ios. Furlanetto, Fr. Corradini, Ios. Perin Patavii, 1940 [1864-1887]

# Lexicon totius latinitatis Onomasticon

Ios. Perin Patavii,1940

# **A Latin Dictionary**

Charlton T. Lewis, Charles Short Oxford, 1933 [1879]

# Dictionnaire latin-français des auteurs chrétiens

Albert Blaise Turnhout, 1954-1967, revised and corrected under the direction of Paul Tombeur (2005)

# Lexicon latinitatis medii aeui

Albert Blaise, Turnhout, 1975 Digitized with the aid of the Fonds National de la Recherche Scientifique and with the collaboration of the Comité National du Dictionnaire du Latin Médiéval Glossarium mediae et infimae latinitatis

conditum a Carolo du Fresne Domino du Cange auctum a monachis ordinis s. Benedicti cum supplementis integris D.P. Carpenterii Adelungii, aliorum, suisque digessit G.A.L. Henschel Editio noua aucta pluribus uerbis aliorum scriptorum Léopold Favre T. I-VIII Parisiis, 1883-1887

# **Firmini Verris Dictionarius**

Dictionnaire latin-français de Firmin le Ver 1440 edited by Brian Merrilees and William Edwards (Turnhout, 1994) including the corrections supplied by the editors

# Anonymi Montepessulanensis Dictionarius

Le glossaire latin-français du ms. Montpellier H236 edited by Anne Grondeux Turnhout, 1998

## Dictionarius familiaris et compendiosus

Dictionnaire latin-français de Guillaume Le Talleur edited by William Edwards and Brian Merrilees Turnhout, 2002

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## Preface

Lecture of this manual may seem difficult. The best way to do it is by simultaneously reading it and consulting the database with concrete questions. The textual and lexical reality is complex, and to be able to fully benefit from it will require an effort.

Serious scholarship is learned one day at a time!

## I. THE DLD

The DLD dictionary project has high aims: to present new techniques of research for consulting dictionaries and various lexica, both modern and ancient. The project covers both single-language dictionaries and multilingual ones. Further, it links the dictionaries to databases of texts and tools for analysing them.

The work involved consists of two types: one involving additions, deletions, and changes, and conceivably amounting to a thorough remaking of these dictionaries and lexica; the other may be considered more archaeological, covering data as it is presented in works of scholarship from the Middle Ages, the Renaissance and the modern period.

The DLD has now been furnished with new software offering many new features.

First of all, new search options are available, of which the most important are:

- the Quick Search (previously called Basic Search) no longer applies exclusively to Blaise Patristic, but to all dictionaries in the DLD;
- in the Advanced Search, you can now select any number of dictionaries you wish, whereas previously your only choice was between searching either a single, or all dictionaries;
- you can now make a more extensive use of the CTLO classifications (Lemmatised CTLO Word-forms, CTLO Lemmas and CTLO References);
- the DLD is no longer exclusively linked to LLT-A (formerly CLCLT), but also to the four other Latin text databases at "Brepolis Latin": LLT-B, eMGH, ACLL and ALD.

In the second place we mention the new interface of the DLD, which is transparent and easy to use, and was developed in order to facilitate research while providing more comfort to the user.

You will discover the other assets of the new version of the DLD during the lecture of this manual, and of course by working with the software.

At present the DLD contains four supplementary dictionaries, two of which are products of modern scholarship and two are medieval: Forcellini's *Onomasticon, A Latin Dictionary* by Ch. T. Lewis and Ch. Short, the *Dictionarius* of the Anonymous of Montpellier and the *Dictionarius familiaris et compendiosus* by Guillaume Le Talleur.

## A. Dictionaries in the DLD

It is fitting that a presentation by the database of dictionaries of the various working tools integrated in the DLD should distinguish between those works that are the products of modern scholarship on one side, and works of medieval origin on the other. Additionally, since it is desirable that every reader should become familiar with the specificities of each dictionary, we shall offer a series of short introductions going from the general to the particular.

## 1.Dictionaries resulting from modern scholarship

## a) Latin in its entirety: the dictionaries by Forcellini and Lewis and Short

Forcellini's "Lexicon totius latinitatis"

Our general dictionary of Latin, which covers the entire period from the first attestations until the middle of the first millennium, is the *Lexicon totius latinitatis* by Forcellini, here in the edition which includes the additions by Furlanetto, Corradini and Perrin, the last author having worked around the middle of the 20<sup>th</sup> century. Mgr. Perrin's *addenda* have been included under the relevant headings.

Here we have the only complete dictionary which has the advantage of completely running from A to Z, indicating long and short vowels, giving the origins of words – particularly the Greek lemmas – and offering translations in several European languages (English, French, German, Italian and Spanish) for a great multitude of words, often enabling users to query the DLD starting from their own language.

## Forcellini's "Onomasticon"

While the Lexicon appeared in four heavy volumes, the *Onomasticon*, published under the name of Forcellini, but redacted by Mgr. Joseph Perrin, who himself equipped it with *addenda*, consists of two bulky volumes.

The integration of the *Onomasticon* in the DLD is of marked importance, the more so because the *Thesaurus Linguae Latinae* on proper names has only been published for the letters A to D and there are no current plans of continuing the publication of an *Onomasticon*.

## "A Latin Dictionary" by Lewis and Short

We have captured *A Latin Dictionary* by Ch.T. Lewis and Ch. Short, published in 1879 and reprinted innumerable times, in the form of scanned images.

*Lewis and Short* resembles other dictionaries common in French, German, Italian, and so forth, in that its authors have based themselves predominantly on Classical Latin but include attestations from the patristic era, stretching to Isidore of Seville at the most extreme end.

It is intended for use by Anglophones, who can also have recourse to Blaise Patristic and Forcellini for the subsequent period.

An index of basic translations in English has been compiled and researchers will be able to find Latin words starting from the selected lemmas in English.

## b) Latin of the patristic age: the Blaise Patristic

The "Dictionnaire latin-français des auteurs chrétiens" by Albert Blaise

The only general dictionary for the patristic age is Albert Blaise's *Dictionnaire latin-français des auteurs chrétiens*, which was compiled after the publication of Alexander Souter's work.

The first edition of Blaise's dictionary dates from 1954. In 1967 a list of *addenda* and *corrigenda* appeared, which we have inserted under the relevant headwords.

Additionally we have introduced a number of corrections, which in the articles are indicated by the symbols < > - addenda and *corrigenda* – and [] – *delenda*.

We have proceeded likewise in uniformising the references with the intention of creating a link with LLT-A and enabling the user to find all the mentions of a particular work within this dictionary, where works are often cited inconsistently (cf. p. 13).

We will steadily continue the task of revising this dictionary.

## c) Latin of the Middle Ages: the Blaise Medieval and the Du Cange

## The "Lexicon latinitatis medii aeui" by Albert Blaise

Following his dictionary for the Latin of the Church Fathers, continuing his work on lexicography, in 1975 Albert Blaise published the *Lexicon latinitatis medii aeui*. In his wish to be helpful and counter the absence of lexical works for scholastic literature, the author has included attestations from beyond the traditional upper limit of the Middle Ages and did not even recoil from inserting some modern terms, for instance those used in the Second Vatican Council (1962-1965).

Recently we have undertaken the correction of this *Lexicon* and we hope that in the future we will also have the opportunity to insert into the DLD medieval dictionaries produced by the various national committees for the publication of a Medieval Latin dictionary, and redacted and published under the aegis of the International Union of Academies, which has recently supported our wish to integrate these modern accomplishments to the greatest benefit of researchers.

#### The "Glossarium mediae et infimae latinitatis" of Du Cange

The principal dictionary of Medieval Latin, which remains essential because of the information on the medieval world that is to be found there (not taking into account specific literature on theology and philosophy) is the *Glossarium mediae et infimae latinitatis* of Du Cange. The edition captured is the one edited by Léopold Favre in 1883-1887. Notably, it includes the additions by the Maurists, and by Don Carpentier and other scholars.

One will notice the large quantity of words from vernacular languages that are attested in the *Glossarium*.

Here we have also inserted the addenda.

In the DLD, this *Glossarium* is presented in the form of scanned images. Indexes, which are especially rich because they contain, remarkably, composite lemmas, allow one to quickly find headings in the *Glossarium*.

## 2. Medieval dictionaries and lexica

## a) Firmini Verris Dictionarius

This Latin to medieval French dictionary written by the Carthusian Firminus Verris (or Firmin Le Ver) in 1440 has the benefit not only of providing translations from Latin to medieval French (and, consequently, enabling queries from medieval French to Latin), but above all of presenting an arrangement of lemmas according to medieval practice. In summary, this is the system of, most notably, Papias, Huguccio of Pisa and John Balbus of Genoa. This way one is introduced to lemmas of whose existence one did not suspect, as under the entry *sacerdos*, where one can find *sacerdotissa*, a priest's wife, and *sacerdotula*, a priest's daughter, as well as *sacerdotulus*, a son of the same.

The presentation of the lexical documentation in the manner of Firminus Verris undeniably offers extremely valuable advantages, apart from the obvious interest of this work as a historical linguistic document.

The dictionary of Firminus Verris has been edited by Brian Merrilees and William Edwards in 1994 in the series *Lexica Latina Medii Aevi*.

### b) Anonymi Montepessulanensis Dictionarius

This is a Latin-to-French glossary taken from manuscript H236 of the Faculty of Medicine of Montpellier, which dates from the 14<sup>th</sup> century. Not only will rare words be found here, such as *acirologia* (also present in Firminus Verris), but this glossary also witnesses forms which are absent from the other dictionaries in the DLD. This is the case with *ambotus*, *-i*, "funnel", which is not found elsewhere, not even in Du Cange.

This anonymous dictionary of Montpellier has been edited by Anne Grondeux in 1998 in the series *Lexica Latina Medii Aevi*.

## c) Dictionarius familiaris et compendiosus by Guillaume le Talleur

Guillaume le Talleur was a printer from Rouen and his dictionary dates from about 1490. His work was known by Du Cange and his successors. This *Dictionarius* is a Latin-to-French dictionary which can be placed in the medieval tradition of Latin lexicography.

This dictionary has been edited by William Edwards and Brian Merrilees in 2002 in the series *Lexica Latina Medii Aevi*.

For each of the dictionaries published in this database, we have implemented any *corrigenda* that needed to be done.

# **B. Lemmatised CTLO Word-forms, CTLO Lemmas and CTLO References**

The DLD includes three CTLO indexes, entitled **Lemmatised CTLO Wordforms, CTLO Lemmas** and **CTLO References**, respectively. They are intended, on the one hand, to provide the user with a tool useful for performing queries in the electronic text databases, especially by facilitating the identification of the forms encountered there, and, on the other hand, to optimize and simplify consultation of the dictionaries in the DLD.

## 1. Lemmatised CTLO Word-forms and CTLO Lemmas

All of the forms present in the texts of LLT-A and in a certain number of other texts have been grouped together in an index, and CTLO has undertaken their lemmatization. More precisely, to each different form is attributed, not the exact lemma as it appears in a certain passage, but rather the lemma or lemmas that are theoretically possible. The form *incidit*, for example, has received two lemmas, INCIDO, ERE (CADO) and INCIDO, ERE (CAEDO), and it is left to the reader to identify the lemma in question for every single case encountered.

In the majority of cases, the lemma conforms to the classification system employed in the *Thesaurus Linguae Latinae*. Of the fundamental principles followed in this system of lemmatization, two especially should be kept in mind:

1. lemmas which are homographs have been distinguished on etymological principles, which conforms fully to the practice of Varro and the whole subsequent Latin tradition;

2. grammatical derivatives do not produce separate lemmas. Thus, an adjectival noun or a participle used as a noun are classified under the adjective and the verb respectively. A word-form transformed into an adverb is classified under the headword from which it is derived. With respect to regressive formations, at the moment we have only distinguished them when relevant attestations have occurred in different periods of *latinitas*.

The following codes are used:

- **On.** for a lemma related to onomastics (proper names);
- **G** for Greek lemmas;
- GAL for French words;
- **H** for Hebrew lemmas;
- **IT** for Italian words;
- **I. d.** for a doubtful lemma or *lemma dubium*;
- **a. d.**, "*aetas dubia*", where the attribution of a period is not certain. In the case of regressive formations for example, an adverb which is attested earlier than the corresponding adjective we have only reckoned with periods, of which we distinguish eight: *Antiquitas, Aetas Patrum I, Corpus Pseudepigraphorum latinorum Veteris Testamenti, Biblia sacra iuxta Vulgatam, Aetas Patrum II, Concilia oecumenica et generalia Ecclesiae catholicae, Medii aevi scriptores* and *Recentior latinitas*.

This lemmatization project is a long-term enterprise which is today still unfinished – all the more so since the CTLO index continues to be enriched by the addition of new texts to the LLT-A. This work, then, will need to be continued without pause.

Meanwhile, all the forms that have been lemmatised up until now, as well as all the lemmas that have been attributed to them, are now an integral part of the DLD. These are the Lemmatised CTLO Word-forms and the CTLO Lemmas. At present, the number of lemmatised word-forms amounts to 309,666, while the number of lemmas is 51,584. Users can either depart from the index of lemmas and discover for each one all of the forms which have been assigned to them, or, the other way round, start with the index of forms and acquaint themselves with their respective lemmas. Because new homographs will continue to appear, the list of lemmas for any form is never closed. The index of lemmas will ease the task for a researcher who wishes to study, for example, different passages in the texts of LLT-A (or another Latin text database) that treat the same subject. Indeed, this index may call to the user's attention forms that he or she might not have considered searching for, preventing him or her from overlooking groups of relevant texts. Thus, if a researcher wishes to read texts dealing with *identitas*, he or she would quite possibly fail to formulate the query ydemptita\* in LLT-A or in another text database were it not for the list of forms occurring under the CTLO Lemma IDENTITAS. On the other hand, the fact that the forms are lemmatised will be found a valuable aid in comprehending the texts by both novices and seasoned Latinists. In this sense, these two indexes form an extension of the information furnished by the dictionaries in the DLD and constitute a link with the text databases.

On the other hand, and this is crucial, there equally exists a **direct link between the CTLO Lemmas and the dictionary headwords**. Indeed, the latter have also received a lemma themselves, which henceforward we shall call "hyperlemma", in the sense that it transcends the various lemmatizations present in the works of the DLD. The significance of the hyperlemma lies in the fact that it makes it possible to group together entries that are sometimes radically different from one dictionary to the other; in fact, the principles of lemmatization, and the way in which lemmas are formulated and written are far from uniform. The hyperlemma is equally useful in the case of queries within the same work, as it often connects several different entries which in fact belong to one and the same lemma (e.g., a verb and its participle, a substantive adjective and the adjective itself et cetera).

This system is still far from complete and presently only applies to the Blaise Patristic and Firminus Verris' *Dictionarius*, but will be completed bit by bit and is already quite useful today.

If one searches, for example, for the entry *haeresis* in the Blaise Patristic and in Firminus Verris, one will find it in the former, but not in the latter, because the term is spelled *heresis* there. However, thanks to the CTLO Lemma HAERESIS, which links to both Blaise's *haeresis* and Firminus Verris' *heresis*, one does not risk overlooking Firminus Verris' article. Another CTLO Lemma, TERO, contains two entries from Firminus Verris: *tero* and *tritus*, while the lemma CALDARIUS, A, UM is linked to the entries *caldarium* and *caldaria* in Blaise, and with the entry *caldaria* in Firminus Verris. CARDIACUS leads to the entries *cardiace* in Blaise and *cordiacus* [sic] in Firminus Verris. ALO refers to *alo*, *alte*, Altissimus and altus in Blaise and alo, alitus and altus in Firminus Verris. Finally, we cite the example of the CTLO Lemma DOGA: this leads not only to the entries *doga* (*doua*) and *doua*, but also to *toga* in Blaise, because in the reference cited for that entry, *toga* is an alternative spelling for *doga* (and so has nothing to do with the classical *toga*), which is not mentioned by Blaise. Without this classification of the dictionary headword *toga* under the hyperlemma DOGA, the researcher interested in *doga* would probably not have considered consulting the article devoted to *toga*.

We also should note that all of the Latin words that are printed in boldface in the articles of Lewis and Short and in the dictionaries of Firminus Verris, the Anonymous of Montpellier and of Guillaume Le Talleur, have themselves been encoded as dictionary headwords. Indeed, very often, these "sublemmas" form lemmas in their own right, which the author of the dictionary has chosen to collect under a single entry by virtue of their common etymology.

The hyperlemmas themselves, on the other hand, have as of yet only been attributed to entries in their proper sense. Thus, to repeat the example of *cardiacus*, if one searches in Firminus Verris using the criterion "Dictionary Headwords" (cf. below, p. 15), one finds it in the article with the entry *cardian*, since there it occurs in boldface and has therefore been marked as an entry; the other way round, if one searches for the same adjective starting with the CTLO Lemma, one will indeed find the entry *cordiacus*, as we have seen, but not – at least not in the current situation – the article devoted to *cardian*, a term which is itself linked to the CTLO Lemma KARDIA G.

## 2. CTLO References

Given the fact that just like the lemmas, the textual references are not always cited in a consistent way, not only from one dictionary to the other but also within the same dictionary, we have found it useful to attribute to each author and title a unique abbreviation and to link the references thus normalized to the corresponding ones in the dictionaries of the DLD. We also offer the possibility of searching for all citations from a given author and/or title, however their formulation in the various dictionaries. At present this linkage between the references in the articles and the normalized references has only been established for the Blaise Patristic, but expansion to other works in the DLD has been foreseen.

Even when presently limited to the Blaise Patristic, the index of CTLO References can already render great services considering the fact that this work very often uses different styles to cite the same work. For example, the *Liber contra Eutychen et Nestorium* by Boethius appears in six different forms (BOET. *C. Eut.*, BOET. *C. Eutych.*, BOET. *De duab. nat.*, BOET. *Duab. nat.*, BOET. *Eut.*, BOET. *Eutych.*), while the *Tractatus* by Zeno of Verona are cited in seven different ways (*S. S. Rom. 11, 33 ap. ZEN. Tr.*, ZEN., ZEN. *Tr.*, ZEN. *Tract.*, ZENO, ZENO *Tract.*, ZENON. *Tract.*). With the help of the link created between the various abbreviations and the corresponding normalized CTLO Reference (in the forms BOET. *Eut.*. and ZENO), all citations from all works can be retrieved, regardless of the different citation styles.

## C. Links between the DLD and the text databases of "Brepolis Latin"

If every dictionary is the description of the lexical system of a given language phase, in its practical use it nevertheless remains primarily a tool which enables us to understand texts. Hence the idea of creating a direct linkage between the DLD and the text databases of "Brepolis Latin": LLT-A, LLT-B, ACLL, ALD and eMGH. With the help of this linkage it is possible to pass directly from the DLD to a text database and to automatically export to this database isolated forms as well as all CTLO lemmatised word-forms that correspond to a given lemma, with the aim of examining the occurrences in the texts there. This is possible in the search mode called **Indexes** in the DLD (cf. p. 28 and 30). Conversely, the DLD can be accessed from any one of the text databases, thus making it possible to consult the dictionaries for any unknown word encountered in the course of reading.

## **II. USING THE DLD**

## A. Navigating in the DLD

Upon using the DLD for the first time, you enter the homepage, where you can select one of four languages available (English, French, German or Italian), and then choose one out of three query modes suggested: **Quick Search**, **Advanced Search**, or a search departing from the **Indexes**.

Each of these three major sections of the DLD has its own specificities, but all offer **the same basic functions** on their search screen.

1. The tabs located in the upper part of the screen offer access to the following functions:

- the tab **BREPOLiS** will take you to the homepage of Brepolis;

- the tab All Products is currently not operational;

- the tabs **EN**, **FR**, **DE** and **IT** (for English, French, German and Italian, respectively) allow you to change the language in the course of your session;

- the **Home** tab serves to return you to the homepage of the DLD;

- the **Settings** tab allows you to define two settings: your Default Language and your Default Startup Page (Quick Search or Advanced Search);

- the **Help** tab provides access to the manual;

- by clicking on the **Exit** tab you will quit the application and return to the Brepolis homepage.

2. The tabs **Quick Search**, **Advanced Search** and **Indexes**, underneath the program's title banner, allow you to switch from between these search modes whenever you choose to.

3. The input field called **Search**, which is located in the title banner of the DLD, allows you to perform a query using an approach which is a little different

from those offered in the three principal search modes. The way this general search works is explained in the **appendix** at the end of this manual.

## **B.** Performing a search

## 1. Quick Search

## a) Search criteria

The Quick Search always searches through all the dictionaries using one of the following five criteria: **Dictionary Headwords, Latin Word-forms, Non-Latin Word-forms, Textual References** and **Full Text**. We should specify that at present, not all of the dictionaries are searchable according all of the criteria available. To make any dictionary searchable according to one of the criteria, the elements in the dictionary susceptible to that criterion must first have been identified and encoded in a special way, and this work is yet to be completed. At present, only a search by Dictionary Headwords is available for all of the dictionaries. For each of the criteria, a detailed account of the current situation is given below, after which the information is summarized in a table.

The dictionaries can be searched:

1. By **Dictionary Headwords**, that is, by Latin words which form the subject of a dictionary's article. Remember (cf. p. 13) that in Lewis and Short, as well as in the dictionaries of Firminus Verris, the Anonymous of Montpellier and of Guillaume Le Talleur, not only the entries as such, but also all Latin words printed in boldface in the body of the articles have been encoded as dictionary headwords.

► This criterion can be used with all dictionaries.

2. By **Latin Word-forms** as they appear in the articles (with the exception of the headwords).

Example: the word-form *sacramento* appears in 23 articles of the Blaise Patristic, in 11 of the Blaise Medieval, in 1 of the *Dictionarius* of Firminus Verris, and in 2 articles of Guillaume Le Talleur.

► This criterion can be used with the Blaise Patristic, the Blaise Medieval, Firminus Verris, the Anonymous of Montpellier and Guillaume Le Talleur.

3. By **Non-Latin Word-forms**, that is, by every non-Latin word, notably the translation of a headword. Thus, a search for **mystery, mystère** returns 7 hits in Lewis and Short, 36 in the Blaise Patristic, and 12 in the Blaise Medieval. The significance of proceeding this way is that it draws attention to all Latin words that can express the term in question, such as, in the case of the example cited, *aenigma, arcanum,* and *secretum* in Lewis and Short. Going through the other lemmas reached by the cited words will naturally provide one with new ideas and suggestions.

► This criterion can be used with Lewis and Short, the Blaise Patristic, the Blaise Medieval, Firminus Verris, the Anonymous of Montpellier and Guillaume Le Talleur.

4. By **Textual References**. This applies to references in their **context**, i.e. as they are cited in the articles (and not to the CTLO references, of which has been spoken above). With the help of this type of interrogation, it is possible to find all references to an author or a work present in a dictionary, for example, those of the *Confessions* of St. Augustine in the two dictionaries by Albert Blaise (meanwhile realizing, of course, that the same work is not always cited in a uniform manner).

► This criterion can be used with the Blaise Patristic and the Blaise Medieval.

5. By the criterion **Full Text**, i.e. by a query of all elements that can be found in an article, of whichever type, including the dictionary headwords. This type of interrogation is particularly well-suited for terms that have not yet been subjected to a specific identification in one dictionary or another, such as the non-Latin words or the references in Forcellini's Lexicon. In spite of all this, with the help of this search criterion one can find, for example, the references to the *Aeneid* or the occurrences of the word "source" in this dictionary.

► This criterion can be used with all dictionaries, with the exception of Lewis and Short and du Cange.

The following table offers a survey of the current situation regarding the criteria available for the different dictionaries (for the criteria CTLO Headwords and CTLO References, cf. below).

CRITERIA	FL	FO	LS	ВР	BM	DC	F۷	мо	TA
Dictionary Headwords	✓	$\checkmark$	✓	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	✓	~
Latin Word-forms	×	×	×	$\checkmark$	$\checkmark$	×	$\checkmark$	$\checkmark$	~
Non-Latin Word-forms	×	×	✓	✓	✓	×	1	$\checkmark$	1
Textual References	×	×	×	✓	✓	×	×	×	×
Full Text	✓	$\checkmark$	×	$\checkmark$	✓	×	$\checkmark$	$\checkmark$	1
CTLO Lemmas	×	×	×	$\checkmark$	×	×	$\checkmark$	×	×
CTLO References	×	×	×	$\checkmark$	×	×	×	×	×

## b) Wildcards and Boolean operators.

One can use **wildcards** for any query: the asterisk (\*) for denoting any character or string of characters, or the absence of characters, and the question mark (?) to denote a single character whatsoever (and not the absence of a character). These signs can be placed at the beginning, the end or the interior of a word. In addition to their obvious advantages, wildcards allow one to especially take into account peculiarities of spelling in the dictionaries of Firminus Verris, Guillaume Le Talleur and the Anonymous of Montpellier. Thus, if you enter the query *haeretic\**, you will not obtain any results in these works, since *haer*- is written *her*- there; you should therefore search for *h\*eretic\**.

Additionally, one can use the **Boolean operators** AND, OR and NOT, represented by "+", ", " and "#" respectively. We wish to point out that in the Quick Search, the operator NOT ("#") only functions when you exclude one or more elements in relation to one or more others. For example, if you request **pater #deus** in the **Full Text** field, you will indeed obtain results (viz. the articles containing *pater*, to the exclusion of those that contain both *pater* and *deus*), whereas if your query is **#aug**\* in the Textual References field, you will not receive the expected response (all articles that do not cite Augustine), but instead you will be shown the following error message: **The system can not parse your query.** Queries only containing the NOT operator can however be executed in the Advanced Search mode (cf. p. 21).

Finally, we wish to point out that **the target field of a query consists of an entire article in a dictionary** and not some kind of subdivision of it, such as the sentence. Consequently, if, for example, you search for the word *spiritus* excluding the expression *spiritus sanctus* – viz. **spiritus # (spiritus sanctus)** – in Full Text mode, you will obtain only the articles containing *spiritus* and not *spiritus sanctus*, and not all occurrences of *spiritus* not followed by *sanctus*. Thus the article *spiritus* in the Blaise Patristic does not occur in your list of results, even though this article not only contains *spiritus sanctus*, but also several instances of *spiritus* not followed by *sanctus*.

## c) Greek words

Greek words can be queried in four of the dictionaries in the DLD: the two dictionaries by A. Blaise on the one hand, and Forcellini's Lexicon and *Onomasticon* on the other.

The words printed in Greek characters in the **Blaise Patristic** and the **Blaise Medieval** have been transliterated according to the system most widely in use. They are also followed by the code ~g. The letter  $\eta$  is transcribed as  $\hat{e}$ ,  $\omega$  is written as  $\hat{o}$ ,  $\chi$  is written as ch,  $\varphi$  is written as ph, and  $\zeta$  is written as z; the *spiritus asper* is represented by the letter h and the iota subscript is rendered as an iota adscript.

In order to find Greek words in these two dictionaries, simply have the appropriate code follow your search formula. You can even request all the Greek words at once by using the formula \*-g.

In **Forcellini's** *Lexicon* and *Onomasticon*, Greek words have been captured as such and it is possible to interrogate these with the help of a keyboard consisting of Greek characters, which can be accessed in the **index** of the **Advanced Search** mode (cf. p. 24). Note that Greek words can be queried in the **Full Text only** and not in the Non-Latin Word-forms, since the latter criterion is not yet available for the two dictionaries mentioned.

The other dictionaries which contain Greek words (for example Lewis and Short) are not searchable according to these criteria.

## d) Performing a query

1. The startup screen of the Quick Search mode has a very simple outlook: it consists of a single level, labelled **Search carried out**; this entails, from left to right:

- a drop-down menu permits you to select one of the five search criteria;

- an input field, in which you can enter your query;

- the Search button, which serves to launch your query;

- the Clear button.

To launch a query, first a criterion must be chosen, next a query should be entered in the input field.

We wish to emphasize that, at the appropriate places, **not only isolated forms, but also expressions can be queried**. For example, one can find in the Latin Word-forms of the Blaise Patristic an expression like *intima uentris*, or for instance search for *uidere deum* in the Full Text.

On the other hand, a query can only succeed if the number of responses it generates **does not exceed 10,000**. If it does (e.g., if you try to query **a**\* in the field **Dictionary Headwords**), you will receive the following message: Wildcard expansion results in too many possibilities (> 10.000). Please rewrite your query.

Select therefore a criterion, for example **Dictionary Headwords**, then enter a search term in the input field, say, **sacrament**\*, and proceed to click on **Search**.

2. Under the panel **Search carried out** a second panel appears, presenting the number of results obtained per dictionary. Its title bar shows the search term(s) and the selected criterion, preceded by the indication **Results by Dictionary**. This is followed by a list of all dictionaries in the DLD, each one accompanied by the number of matches it contains. If no response was generated for a particular dictionary, its name is printed in grey and it is followed by a zero; in the opposite case, it is printed in red and underlined as it forms a hyperlink. In the example mentioned, the query is only ineffective for Forcellini's *Onomasticon*. As the query by Dictionary Headwords is valid for all works in the DLD, the absence of results in this case necessarily indicates that Forcellini's *Onomasticon* does not contain the queried terms. For the other criteria, **the fact that a dictionary does not generate a response can also indicate that it is not yet searchable using the selected criterion**. It is for this reason that if you query the same word **sacrament**\* in the Latin Word-forms, for example, you will not obtain any responses from Forcellini's *Lexicon*, Lewis and Short and Du Cange.

3. Next, click on the dictionary of your choice, for example the Blaise Patristic. A third panel is shown, which, in the left corner of its title bar, gives the name of the dictionary, the number of results displayed on the current page, and the total number of results (here: 1 - 3 of 3). Below the title zone a list of dictionary entries corresponding with the query is shown. Each screen can display a maximum of 50 responses. If the number of responses exceeds 50, you can navigate through the list of results with the help of the arrow buttons located to the right of the title zone:



4. Clicking on one of the lemmas, for example *sacramentum*, will open a fourth panel.

In the centre you will find **the relevant article of the dictionary** concerned. For Du Cange and Lewis and Short, a scanned image of one page from the printed book will be shown, with a red arrow pointing to the start of the article.

The panel to its upper left side shows the **CTLO Lemma** that corresponds to the Dictionary Headword in question. If during a search you receive the answer "**Undefined**" here, this means that the Dictionary Headword which you requested has not yet been linked to a CTLO Lemma. (Remember that presently the CTLO Lemmas are limited to entries of the Blaise Patristic and Firminus Verris.) In the case of *sacramentum*, the CTLO Lemma is identical with the lemma of the Blaise Patristic, but, as shown above (p. 12-13), this is not always the case. By clicking on the lemma you will gain access to the **Index of CTLO Lemmas**, where you can continue your search. The properties of this index will be described in more detail in a special chapter of this manual (p. 29-30).

The frame on the lower left side gives the list of the **CTLO References**, i.e., all of the references which occur in that article, but in their normalized form as given by CTLO. These references are cited according to their order of appearance in the article. Next to each of these you see two icons. A click on the one on the left () takes you to the **Index of CTLO References**, which is described further down (p. 30-32). When you click on the icon on the right (), all corresponding references cited in the article will be highlighted by way of yellow shading. As with the CTLO Lemmas, the message "**Undefined**" is shown if the references of the dictionary have not yet been linked to a CTLO Reference (recall that for this moment, the CTLO References only refer to entries of the Blaise Patristic). This function is particularly useful for tracing references in a long article.

The frame on the right, "**Surrounding Headwords**", displays the environment of the headword you are interested in, which consists of the four previous entries and the five next entries in the electronic version of the dictionary concerned. By clicking on one of these entries you will gain access to the article devoted to it in the dictionary.

If the article which you are consulting belongs to a dictionary of which the sublemmas have also been encoded as Dictionary Headwords (Lewis and Short and the three "historical" dictionaries, cf. p. 13), a frame labelled **Identified Headwords** can be seen underneath the panel Surrounding Headwords, where the headword is cited as well as all sublemmas of the article in question.

## e) Exporting as a PDF or showing it in a new window

Articles from shown on your screen **can be exported in the form of a PDF file**, with the exception of the Du Cange or Lewis and Short. To export such an article, all you have to do is click on the link Export as PDF located to the right of the title zone of the fourth panel.

Du Cange and Lewis and Short are presented in the form of scanned images and because of this, the screen displays a page rather than an article from these works. However, since the screen only shows part of the page, for greater convenience, it is possible to open a new window showing the page in its entirety. To do this, click on the link **Show scan in new window**, which can be found in the title bar. You can export the page from there.

## 2. Advanced Search

The Advanced Search offers you more possibilities than the Quick Search. It allows you:

- to select the dictionary or dictionaries of your choice;
- to perform queries with the help of the CTLO classifications (CTLO Lemmas and CTLO References);
- to combine several search criteria;
- for each of the search criteria, to formulate a query using an index.

The Advanced Search screen presents four panels, labelled respectively:

- Dictionaries
- Search in article
- Search using the CTLO classifications
- Actions

## a) Selecting one or more dictionaries

The panel at the left side of your screen offers you a list of all dictionaries in the DLD, which are all marked as selected by default. You can deselect the ones you do not wish to query and subsequently reselect the ones you are interested in, or select all of them using the option **Select All**.

#### b) Searching in an article

## Combining criteria - using wildcards and Boolean operators

The panel with the name **Search in article** offers you the same five search criteria also available in the Quick Search, each of these being accompanied by its own input field, allowing you to use them in combination.

In the right corner of this panel's title field, you will find the icon  $\mathbf{0}$ : dragging your mouse over it will bring up a table summarizing the criteria presently available for each of the dictionaries.

As in the Quick Search, you can use the **wildcards** "\*" and "?", as well as **Boolean operators**.

With the help of Boolean operators, you can determine a logical relationship between:

- the different criteria,

- the different terms which you enter in the same input field.

To create a logical relationship between the criteria, you must use the terms **AND**, **OR** and **NOT** which can be found in the drop-down menu to the left of each criterion. To establish a logical relationship between the terms entered in the same input field you can make use of the signs "+", ", " and " # ".

Here, by selecting the operator **NOT** for a given criterion, one can enter a query consisting of an exclusion, i.e. search for all articles that do not contain the indicated word or words. As we have seen, this type of query is not possible with the Quick Search. Here, however, it can be useful. For example, if one is interested in the authors or the works cited in a dictionary, it can be helpful to ask not only in which articles these author(s) or work(s) are cited, but also in which articles they are not.

#### Examples of the use of the Boolean operators AND, OR and NOT

When combining two criteria:

- **OR for the two criteria** gives the articles that answer to the query entered for the first criterion, or to the query entered for the second criterion, or to both queries.

*Example*: the query **anim**<sup>\*</sup> in the Dictionary Headwords, with **OR**, and **spirit**<sup>\*</sup> in the Full Text, with **OR**, results in those articles containing an entry starting with *anim*-, those containing words that begin with *spirit*-, and those that both have *anim*- as a headword and *spirit*- in the full text.

- AND for the two criteria yields those articles which answer both to the query entered for the first criterion and to the query entered for the second criterion.

*Example*: querying **anim**\* in the Dictionary Headwords using **AND** and **spirit**\* in the full text also using **AND** finds the articles that contain an entry commencing with *anim*- and words starting with *spirit*-.

- AND for the first criterion and OR for the second finds the articles answering only to the first criterion and those responding to both criteria simultaneously.

*Example*: querying **anim**\* in the dictionary entries, with **AND**, and **spirit**\* in the Latin word-forms, with **OR**, will on the one hand find the articles that have an entry starting with *anim*- and no Latin word in *spirit*- in the text, and on the other hand those that have an entry starting with *anim*- and contain words starting with *spirit*- (for example, the article *animalis* in the Blaise Patristic).

- OR for the first criterion and AND for the second finds the articles that respond either to the second criterion only or those that respond both to the second and to the first criterion.

*Example*: the query **anim**\* in the dictionary entries, with **OR**, and of **spirit**\* in the Latin word-forms, with **AND**, yields **either** the articles which contain words starting with *spirit*-, **or** the articles which contain Latin words starting with *spirit*- and having a headword starting with *anim*-.

- **NOT for the first criterion and AND for the second** finds those articles that respond to the second criterion and excludes those that respond to both.

*Example*: the query **anim**\* in the dictionary entries with **NOT**, and **spirit**\* in the full text with **AND** finds articles which contain words that start with *spirit*-, excluding those which also have an entry starting with *anim*-. Thus you will not find, for example, the articles devoted to *anima* and to *animus* in the Blaise Patristic.

When you have entered your query, you have the possibility to either delete it entirely, with the help of the button **Clear All** located in the panel **Actions**, or to erase from it the criterion or criteria of your choice, by clicking on the **Clear** button located to the right of each input field.

In order to launch your query, click on the button **Search** in the panel **Actions**.

Suppose that you have entered **spirit\*** in the **Dictionary Headwords** field and chosen the operator **NOT**, then repeated the same **spirit\***, this time in the **Full Text** field and with the operator **AND**, and that all dictionaries were selected with the exception of Forcellini's *Lexicon* and *Onomasticon*.

After you have clicked on Search, the presentation of the results is essentially similar as in the Quick Search, but the software offers you new options and provides additional information.

The **uppermost level of the first screen with results** is divided in two panels. In the left panel, named **Actions**, two buttons allow you either to perform a **New Query**, or to **modify the query**. The right one, bearing the title **Search carried out**, offers you three types of information:

- A **warning** reminding you that not all dictionaries are searchable according to all of the search criteria. This message does not appear if all of the criteria used are compatible with the dictionaries which you have selected. In the present case, the criterion Full Text, which you have used, does not apply to Lewis and Short and Du Cange, both included in the selection.

- A list of the **Selected Dictionaries**.

- Details concerning the **Criteria** of your query. For each of the criteria used, first the Boolean operator chosen (**AND**, **OR** or **NOT**) is mentioned, next the name of the criterion, and finally the query entered in its input field.

In the case of the example given, the panel labelled 'Search carried out' contains the following information:

Warning: Not all search fields can be used with each dictionary.

**Selected Dictionaries**: Blaise Patristic, Blaise Medieval, Firminus Verris, Du Cange, Lewis and Short, Le Talleur, Anon. Montepessul. **Criteria**: NOT Dictionary Headwords: {spirit\*} AND Full Text: {spirit\*}

The list of results provides the number of matches per dictionary. As in the case of the Quick Search, the dictionaries which did not respond to the query ("0 results") are displayed in grey. The dictionaries which have not been selected for the query are also shown in grey, but instead of the number zero, they are followed by the code "/", allowing you to distinguish them from the selected dictionaries. Here, the code "/" is present for the two dictionaries of Forcellini, while Lewis and Short and Du Cange have a zero because they cannot be queried with the criterion Full Text.

For the rest of the query, you can proceed as with the Quick Search.

### Using the indexes.

Each criterion has its own index, which you can access by clicking on the **Browse** button located to the right of each input field. Using the browselist allows you to fine-tune your search in order to obtain results which respond to your query in a very specific way.

Click on one of the **Browse** buttons, for instance the one for the **Dictionary Headwords**. A popup window containing a browselist will be opened. In the upper part of this window, two options are available, labelled **Filter Expression** and **Position on** respectively. In the input field with the label **Filter Expression**, you can enter one or more expressions with or without wildcards and/or Boolean operators. The option **Position on** permits you to position yourself on an exact entry within the browselist.

Using the option Filter Expression. Type, for example, \*eus #\*aeus in the input field and then click on Apply Filter. You will obtain a list of entries ending in *-eus*, excluding those ending in *-aeus*. The results are shown in the window's central panel. In the title field of this panel, the number of results (here: 1759) and the section of the list that is visible on the screen (here: 1 - 100) are specified. Each screenful can display a maximum of 100 responses. The list can be navigated with the help of the arrow buttons located in the right corner of the title bar:

allows you to move to the next screen;
allows you to jump forward ten screens (=1000 results);
allows you to jump to the end of the list;
allows you to move to the previous screen;
allows you to jump backward ten screens (=1000 results);
allows you to return to the start of the list of results.

Now you can consult the list and select the words you are interested in by clicking on them. Each selected word is duplicated in the field **Selection** below the list. To cancel the procedure and close the window, click on **Cancel**. To confirm your selection, click on **OK**. The browselist window is closed and the forms which you have chosen are copied into the field of the search criterion in question. You can now continue your query by proceeding as explained above.

Using the option Position on. To position oneself on a specific entry of the browselist, one must enter a single letter, the beginning of a word or a complete word in the input field. Wildcards and Boolean operators of course do not apply here, not even the asterisk at the end of a truncated form. For example, if you want to go to the first word in the browselist of Latin Word-forms that begins with *sacr*-, you can simply enter *sacr*, then click on **Position**.

It is possible to use **Greek characters** in the input field. To do so, first click on the icon that represents a keyboard (**W**), located immediately right of the input field. A small panel with the letters of the Greek alphabet will appear. In

order to write a form or the beginning of a form in Greek, simply click on the appropriate letters as if you were typing; they are directly copied to the input field.

Comments.

1. The system does not take accents, aspiration or iota subscript into account;  $\sigma$  also serves as a final sigma.

2. The Greek keyboard is available in each of the five browselists, but, as we have seen (cf. p. 17), the Greek characters can presently only be used with Forcellini's *Lexicon* and *Onomasticon*, and even then exclusively in the full text.

## c) Searching with the help of CTLO Classifications

This option enables one to perform a query in the dictionaries by using the **CTLO Lemmas** and the **CTLO References**.

The different classifications by CTLO have been explained in the first section of this manual (cf. p. 11-13); even so, we should specify that the **index of CLTO Lemmas of the Advanced Search only contains lemmas which have been linked to an entry of a dictionary** (the "hyperlemmas"). The complete index itself can be accessed in the **Indexes** section of the DLD, which forms the subject of the next chapter.

It should also be noted that presently the CTLO Lemmas are restricted to the entries of Blaise Patristic and Firminus Verris, and that the CTLO References at this time have only been linked to the references cited in Blaise's aforementioned work.

It will be remembered that, in the dictionaries of Lewis and Short, Firminus Verris, the Anonymous of Montpellier and Guillaume Le Talleur, all Latin words within an article that are printed in boldface have also been tagged as dictionary entries, while the CTLO Lemmas have only been attributed to actual headwords. Thus the same query in Firminus Verris may give different results depending on whether the Dictionary Headwords filter or the CTLO Lemmas filter is used (see the example of *cardiacus* further above).

As previously explained, the query here offers the possibility to find, regardless of their divergences, all Dictionary Headwords that belong to the same lemma, or all references that stem from the same work.

The section of the screen dedicated to the CTLO Classifications is presented in a way very similar to that of the direct queries in the articles. Just like the other search criteria, the CTLO Lemmas and References each have their own input field, accompanied by a dropdown menu allowing one to choose between the three Boolean operators, a link to its browselist, and a **Clear** function. Moreover, they are furnished with a button **Delete Selected**, absent from the other criteria, which will be discussed further below.

The search procedure itself, although very similar to the one we have seen further above, yet differs in certain respects. Thus, it is not possible here to type a query directly in the input field: it is necessary to pass through the browselists first.

By clicking on the link **Browse** for the CTLO Lemmas or References, you get access to the respective browselists, which appear in a popup window. Open, for example, the browselist of the **CTLO Lemmas**. Here also you have a choice

between the options **Filter Expression** and **Position on**. Enter the formula **di**\* in the **Filter** field, then click on **Apply Filter**. The list of results (here: 606) is shown in the central portion of the window, with a maximum of 75 hits per screen. Navigation through the list is done in the usual way, with the arrow keys located in the right corner of the title bar. Click on the lemmas of your choice to select them. Select in this manner the lemmas DIABOLUS, DIABOLICUS and DIABOLOSUS. The selection is copied to the field in the window's lower panel, not in a horizontal row, but in the form of a vertical list. Manual intervention, whether for adding, deleting or modifying elements, or for changing the Boolean operator, is not possible with this list. If you select several CTLO References or Lemmas, the relation between these References or Lemmas will always be OR. Example: if you select two works of Bede the Venerable, you can only query articles which contain either the one or the other, or both; it is not possible to query only the articles that contain both of these.

To cancel or confirm your selection, proceed as with the other browselists (cf. p. 22). If you confirm, the window closes again and the selected lemmas are copied to the relevant field of the search screen of the section Advanced Search, always in the form of a vertical list. At this stage, instead of continuing, you can cancel either your entire selection, by clicking on **Clear**, or part of it, by clicking first on your selection and then on **Delete Selected**. To continue with your query, click on **Search** in the **Actions** panel at the bottom of the screen. From this moment onward, the procedure is identical with the one previously described.

In our example, you will obtain all the articles of the Blaise Patristic and Firminus Verris of which the entry has received one of the three hyperlemmas selected, i.e. six and two articles, respectively. Regarding Blaise, the response not only gives the articles on *diabolicus*, *diabolosus* and *diabolus*, but also those that have as their entry *zabolicus* (*zabulicus*), *zabolus* (*zabulus*) and *ziabulus* (*ziabolus*); in Firminus Verris, the relevant headwords are *diabolus* and *zabolus* (with, in each of the articles, several sublemmas in boldface).

Of course you can **combine** CTLO Lemmas and References in the same query, and/or combine these with the other search criteria.

Example. Enter the search formula ambr\* + uirg\* in the field Filter Expression in the browselist of CTLO References and click on Apply Filter. You will obtain three responses: Ambr. Exh. uirg., Ambr. Virg. and Ambr. Virginit., respectively for the Exhortatio uirginitatis, De uirginibus and De uirginitate by Ambrosius, works that are cited by Blaise in his work, each in several different ways. Select these by clicking on them one by one, then click on OK. Next enter uirg\* in the fields Latin Word-forms and Non-Latin Wordforms, choose the Boolean operator AND in both cases, then click on Search. You will obtain the five articles in Blaise Patristic that simultaneously contain at least one of the three references as well as Latin word-forms and non-Latin wordforms (French, in this case) beginning with uirg- (virg- for the French words). If, while using the same criteria, you choose the operator **OR** for the **Non-Latin** Word-forms, you will get the 16 articles that contain at least one of the references and the two types of words in *uirg*-, or at least one of the references and only the Latin word-forms in *uirg*-. Note that, since the target field of the query is the article as a whole, the words in *uirg*- in the articles given in the response are not necessarily connected to any of the three references selected.

Thus, in the article on *integritas*, the French substantive noun "virginité" comes from Tertullian, and the Latin adjective noun *uirginalis* is found in Augustine.

## 3. Indexes

The third search mode offered by the DLD is a query by Index. These Indexes, four in total, are called Dictionary Headwords, Lemmatised CTLO Word-forms, CTLO Lemmas and CTLO References, respectively. It is possible directly to access the LLT-A and the other Latin text databases at Brepolis (LLT-B, ALD, ACLL and eMGH) from the index of Lemmatised CTLO Word-forms and CTLO Lemmas; on the other hand, for all of the works cited in the Blaise Patristic that are included in the LLT-A, the index CTLO References gives access to the Background on the Text aimed at these texts in these databases.

The indexes of CTLO Lemmas and CTLO References can also be accessed via the lists of results of the Quick Search and the Advanced Search (cf. above, p. 19).

To gain access to the four Indexes, click on the tab **Indexes** located underneath the title banner of the DLD. In a second series of tabs directly below, you can choose the index you are interested in. By default, upon entering the Indexes section, you will find yourself inside the index of Dictionary Headwords.

#### a) Dictionary Headwords

This index consists of the lists of words that form the subject of an article in each of the dictionaries. It differs from the browselist of Dictionary Headwords of the Advanced Search mode on two accounts. First, while the latter can be queried for a single dictionary as well as several dictionaries at once, here, on the contrary, the query can only be performed in one dictionary at a time; secondly, the browselist in the Advanced Search mode shows the list of the *different* forms that constitute the dictionary headwords, whereas that of the Indexes section gives the actual list of headwords. For example, a single tempus occurs in the browselist of headwords of the Dictionarius of Firminus Verris in the Advanced Search, whereas the one in the current section has two, because Firminus Verris has two headwords tempus. Likewise, the index of Dictionary Headwords of Du Cange offered in the Advanced Search only mentions a single entry aqua, whereas the corresponding browselist of the Indexes section cites 44, since 44 articles actually have this word in their entries; there are seven entries AQUA and a number of combinations that contain AQUA and one or more other terms (e.g. AQUA GREGORIANA, AQUA VIVA, AQUA MUSCATA).

Such an approach can be useful, as it allows one to gain a more accurate understanding of the way in which each of the dictionaries is organized.

The central part of the screen is subdivided into three panels. The left panel, **Dictionaries**, allows for the selection of a work; the panel with the label **Search by dictionary headword** contains the available search options; this portion of the screen is identical for each of the four indexes of this section of the program. The panel below it shows the **Results**.

To select a dictionary, tick its title in the panel **Dictionaries** (for example the Blaise Patristic).

In the panel **Search by dictionary headword** you find, as in the browselists of the Advanced Search, the options **Position on** and **Filter Expression**, whose functioning has been explained further above (cf. p. 23-24). However, here you have **two ways of positioning**.

- Click on a letter from the list located next to the label **Position on** to open the browselist for the group of words beginning with that letter.

- If you wish to further specify the location where you want to open the index, you can enter the first few characters of the queried word in the input field to the right of the text "**or on**", then click on **Position**.

Click for example on the letter **M** in the alphabet shown. Part of the index is now displayed in the **Results** panel, of which the first word is the first headword of Blaise's dictionary beginning with the letter m. In the title bar of this panel, the extract of the index that is shown is specified by the serial numbers of the first and the last entries, followed by the total number of entries of the dictionary consulted (here: 166697 – 16796 of 29374). Each screenful can display a maximum of 100 responses. As with the browselist of the Advanced Search, navigation in the list is done by means of the arrow buttons (cf. above, p. 18-19).

Clicking on the entry of your choice will open a new window presenting the corresponding **article** of the dictionary, accompanied by a variety of **information**.

The article is displayed in the panel of the Full Text panel.

The panel labelled **Info** first mentions the entry that is the subject of the article, as well as the name of the dictionary consulted. When applicable, this information is followed by the CTLO Lemma connected with the entry. It functions as a hyperlink which will take you to the relevant location in the index of CTLO Lemmas. Finally, if you click on the link **View** located to the right of the label **Full Information**, you also open the article, but this time it will be surrounded by the same information and search possibilities that are offered in the Results panel of the Quick Search and the Advanced Search (CTLO Lemmas, CTLO References, Surrounding Headwords; cf. above, p. 19).

## b) Lemmatised CTLO Word-forms

As has been explained in the first part of this manual (p. 12), this index contains all word-forms present in the texts in the LLT-A, as well as in a certain number of other texts, that have been lemmatised by CTLO. Each of these forms is connected to its **lemma** or **lemmas**, and, in addition, the forms can be used to **directly access** the context(s) of the **LLT-A or the other Latin text databases** of **Brepolis** in which they occur.

Click on the appropriate tab to open this index. The portion of the screen located underneath the tabs is subdivided into three panels, which in turn are split in two levels. In the upper level, the panel labelled **Search by lemmatised CTLO word-form** contains the search options that are available; the lower level, labelled **Results**, will show you the results in two panels: to the left the index is

opened at the desired location or the forms selected via the filter, to the right other information, and links.

The search options shown in the part **Search by lemmatised CTLO wordform**, identical for the four indexes of this section in the DLD, have been explained above (p. 27).

Suppose that you want to know if any plural forms of *trinitas* have been lemmatised. To this end, enter *trinitat* in the input field next to the words "**or on**", and then click on **Position**. The appropriate section of the index appears in the left panel of the **Results** level, the right panel remains empty. In the title bar of this panel, the extract of the index visualized is defined by the serial numbers of the terms shown, followed by the total number of lemmatised forms which form that index (here: 296951 - 297010 of 309666). Each screenful can display a maximum of 60 responses. As in the index of the Advanced Search, the list can be navigated by means of the arrowed buttons (cf. above, p. 18-19).

You find that the index does indeed contain two forms of the plural of *trinitas* (*trinitates*, *trinitatibus*) – note that the plural *trinitatum* is also attested in LLT-A, but that it does not occur in the index because it has not yet been lemmatised. Click on the first one, *trinitates*. Other information and search possibilities are shown in the panel to the right. The uppermost part contains the name of the selected form. Below it, the label **CTLO Lemmas** is followed by the CTLO lemma(s) corresponding to the form (here: TRINITAS). The lemma(s) constitute(s) a link, on which you can click in order to position yourself on the appropriate entry of the index of CTLO Lemmas. Finally, under the title **Linked Databases**, the **five Latin text databases of Brepolis are mentioned** (LLT-A, LLT-B, ACLL, ALD, eMGH). By clicking on the link of your choice, you immediately reach the search screen of the corresponding database, and the selected form is automatically copied to the input field of the forms, which allows you, while continuing your query, to consult the passage(s) in which it occurs.

It should not come as a surprise that, more than once, querying a form from the CTLO index in a text database results in zero matches. This either means that it is present in one of the five text databases, but not the one you have selected, or that the form occurring in our analytical lists was taken from a text which is presently not included in the text databases at Brepolis. Thus the form *phylosophyae* is attested in LLT-A and in eMGH, but not in ALD, ACLL and LLT-B. A query for the form *abfestucatione* will not generate a single response, because it has been attested in a text not present in any of the five databases.<sup>1</sup>

This index will also be very useful when you try to identify a form which you encountered in LLT-A or in one of the other Latin text databases.

<sup>&</sup>lt;sup>1</sup> This form appears in a charter written in the 12<sup>th</sup> century by abbot Gerard of Ninove and published in J.J. Smet, *Chroniques des Flandres*, II, Brussels, 1837-1865, p. 783 n. 46; this charter has also been included in the database *Thesaurus diplomaticus*, published by the CETEDOC, the Comité national du Dictionnaire du Latin médiéval et la Commission royale d'Histoire (Brepols, 1997).

## c) CTLO Lemmas

What is meant by CTLO Lemmas has been explained further above (p. 11-13). As said, presently these only concern Blaise Patristic and the *Dictionarius* of Firminus Verris. Whereas the corresponding index in the Advanced Search only contains the lemmas that are linked to dictionary entries (the "hyperlemmas"), the index presented here contains all the lemmas that correspond to the Lemmatised CTLO Word-forms. For each lemma, you will find the **list of forms to which it has been attributed** thus far; you also have the possibility to **transfer at once all forms linked to a given lemma to the search field of LLT-A and the other Latin text databases of Brepolis**, in order to consult the passages where they occur.

## Moreover, each lemma linked to one or more dictionary entries is accompanied by the list of those entries, with a link to the articles concerned.

To reach this index, click on the tab which bears its name. As in the index of Lemmatised CTLO Word-forms, the portion of the screen located underneath the tabs is divided in three panels, subdivided in two levels. In the upper level, the panel with the label **Search by CTLO lemma** offers you the search options available; the lower level, labelled **Results**, will show the results in two panels: to the left the index, which is opened at the desired entry or the lemmas selected via the filter, to the right other information and links.

To describe the uses for this index, we start with an example once again. Suppose you are interested in the lemma *eleemosyna*. If you are not certain of its orthography, given the fact that this word is encountered in many different spellings, type for example **\*el\*mos?n\*** in the field **Filter Expression** and click on **Apply Filter**; if you are certain, say, of the beginning but not of the end of the word, and/or if you do not wish to obtain merely the exact answer to your question, but position yourself on the relevant location in the index, enter for example *eleemos* in the field following the indication "**or on**", next click on **Position**. The first screenful of results is presented in the same way as that of the index of Lemmatised CTLO Word-forms. If you have used the option Filter Expression, you obtain three responses in the left panel of the level **Results**: ELEEMOSYNA, ELEEMOSYNALIS and ELEEMOSYNARIUS; if you have chosen the option "**or on**", you obtain, in the same panel, an extract of the index of lemmas beginning with ELEEMOSYNA and containing 60 words, from which you can navigate by means of the arrow buttons.

By clicking on the lemma ELEEMOSYNA, you see appear in the right panel, underneath a title bar repeating the name of the lemma, **three types of information**.

First of all, under the title **Appears in articles**, you are introduced to the entry or the entries of dictionaries linked to the lemma, as well as the name of the dictionary concerned, cited in an abridged form and between parentheses; here too are mentioned two entries of the Blaise Patristic: eleemosyna (elemosyna... (BP), et elemosyna (BP). The name of the other dictionary of which the entries have been lemmatised, Firminus Verris, is abridged as (FV). If the selected lemma is not linked to any dictionary entry, this zone remains empty. By clicking on one of the entries, you open a window that gives you the dictionary's **article**,

in the same fashion as in the index labelled Dictionary Headwords (cf. above, p. 27).

Finally, just as in the index of Lemmatised CTLO Word-forms, the **five Latin text databases of Brepolis** are mentioned under the title **Linked Databases**. By clicking on the name of the database you wish to consult, you are taken directly to its search screen and **all the forms of the CTLO index that have received this lemma are at once copied** to the input field of the word-forms.

As has been signaled with regard to the Lemmatised CTLO Word-forms, it is possible that certain forms linked to a given CTLO Lemma are not attested in a specific textual database, or are not attested in any of them. It suffices then to delete these forms from the list and repeat the query.

Finally, under the title **Lemmatised CTLO Word-forms**, you see the list of all the forms of the index of CTLO word-forms to which this lemma has been attributed. While lecture of this list is already interesting in itself – especially in cases like this one, where the spelling is so diverse -, each of the forms also constitutes a link which will take you to the index of **Lemmatised CTLO Word-forms**.

## d) CTLO References

The meaning of the CTLO References, which are presently available for the Blaise Patristic, has been explained in the first section of this manual (see p. 13). This index is identical to the one appearing in the Advanced Search, but, whereas the latter only offers a linkage with the dictionary articles, the index available here allows you to display, for each text cited that is present in LLT-A, the **Background on the Text** which accompanies it there.

You enter this index by clicking on the appropriate tab. The structure of the screen that appears is identical to that of the search screens of the indexes Lemmatised CTLO Word-forms and CTLO Lemmas, i.e., a level here labelled **Search by CTLO reference**, which contains the search options, and a level labelled **Results**, which will present to you the results in two panels: to the left side, the index opens on the requested entry or the references selected by means of the filter, to the right side, other information and links.

Yet the search options of this index differ from those of the two previous indexes in that they are split into a **Short Description** and a **Long Description**. By entering your query using the short description, you search the references in their normalized form by CTLO, that is, in an abridged form. A query using the long description allows you to find a reference starting with each element contained in its complete formulation.

The **Short Description**, which offers the same search options as the other indexes of this section (cf. p. 27), can be used when the abbreviation of a certain reference can easily be guessed. Thus, if you are searching for Cicero's *De legibus*, you have every chance of obtaining it by entering in the field **Filter Expression** of the **Short Description** the query **cic\* + leg\***, and by clicking on **Apply Filter**. Or, if you want to position yourself on a specific location in the index, for example that of the works of Augustine, you can type **aug** in the relevant input field of the Short Description, next click on **Position**. If the query for a reference by means of the Short Description generates no results, it is advisable to re-enter the query in the Long Description, because it may be that

some of the terms entered do not occur in the abridged form of the requested reference.

The **Long Description**, which is used exclusively with a filter, is recommended when you are not sure of the abridgment of a reference, or, as has been said, when a query does not yield any results, or in order to refine your query, if you want to be certain that you have obtained all results corresponding to the query, or to avoid any "noise".

#### Examples.

- If you search for Cicero's *Lucullus*, the query **Cic\* + luc\*** in the field Filter Expression of the Short Description will not generate any responses, because that text has been captured under the name *Academica priora siue Lucullus*, and the reference, in consequence, has been abridged to *Cic. Acad. pr.* Contrarily, you will certainly obtain this reference by entering the same query in the field **Filter Expression** of the **Long Description** and next clicking on **Apply Filter**.

- If you wish to retrieve all the sermons cited in the Blaise Patristic (or at least, all the works cited which contain a form of the word *sermo* in their complete title), and you request **serm**\* in the filter of the Short Description, you will only obtain 15 results, whereas the same query in the Long Description gives you 30. This happens for the reason that, once again, not all of the texts containing a form of *sermo* in their complete title also contain one (even if abridged) in their CTLO Reference.

- Suppose that you want to consult the articles which cite the *Canticle of Canticles* and the works that have been devoted to it. For the reasons already expounded, the query **cant\* cant\*** in the filter of the Short Description generates no results; when you search for **cant\*** instead, however, the response is not wholly satisfying either. This query will in fact give, in addition to the works actually treating the *Canticle of Canticles*, some works dealing with other types of canticles, but not those that interest you here; moreover, it does not contain the *In Canticum canticorum expositio* of Aponius, since that work is simply abridged to *Apon*. The best way of proceeding is then to search for **cant\* cant\*** by means of the **Long Description**.

When you have launched a query, the results are displayed in the left panel of the **Results** level. Each screenful can contain a maximum of 20 responses. To navigate through the list, use the arrow buttons. Each reference is first cited according to the normalized CTLO form, next in its entirety. (If the complete reference is too long for the space allotted, it is only partly shown, and that fragment is followed by three suspension points). To select a reference, click on it. In the right panel, under a title bar bearing the name of the reference selected, **three types of information** are offered to you.

First, under the name **Description**, the complete reference of the selected work is shown.

Next comes the **Background on the Text**, followed by a link labelled **Show Background on the Text**, by way of which you can access, in a new window, the **Background on the Text concerning this work in LLT-A**.

Finally, as in the index of CTLO Lemmas, under the title **Appears in Articles** you see a list of entries of dictionaries that contain the selected reference, followed by the name of the dictionary in abridged form and between parentheses. Again, at present this concerns only the Blaise Patristic (BP). By clicking on the name of an entry, you enter the **article**, presented in exactly the

same form and offering the same possibilities as in the index of Dictionary Headwords and the index of CTLO Lemmas (cf. above, p. 27 and p. 30).

\*

#### **APPENDIX:** general search

As signaled before (cf. p. 14-15), the input field labelled **Search** which can be found inside the title banner of the DLD, and which is present on the search screen of the three major subdivisions of the program (Quick Search, Advanced Search, Indexes), permits queries with an approach that is slightly different from those used elsewhere.

At the start of your examination, you cannot select search criteria: the search is **always** applied to the **Dictionary Headwords** and to the **Full Text** (except for Lewis and Short and Du Cange, since the latter criterion does not apply to them). You can however use the **wildcards** "\*" and "?", and the **Boolean operators** "," (OR), "+" (AND) and "#" (NOT).

To launch a query, enter a search expression in the input field, then click on **Search**.

Let us take as an example **zi**\*. The first screenful of results that appears is subdivided in nine panels, one for each dictionary, and shows for each of these the number of responses obtained in the dictionary entries and in the full text (for Lewis and Short and Du Cange, exclusively the Dictionary Headwords).

The significance of this presentation is that it gives an immediate overview of the distribution of responses between the two criteria employed in this type of query, which cannot be done when using the other types of search. We wish to stress, however, that this count does not distinguish between the articles that only respond to the query for either the one or the other criterion and those that respond to both. Thus the numbers given for the Dictionary Headwords not only include the articles that merely respond to the query on the level of their entries (with the example used here, this is notably the case with *zio* in Blaise Patristic), but also those that respond to it both at the level of their entries and at the level of the full text (e.g. zizania in the same dictionary). This principle also applies to the numbers provided for the full text. Moreover, since the full text includes the dictionary headwords, the number of responses also includes those articles that only contain the queried form in their entry, and not in their interior (e.g. Blaise's zio). Consequently, the numbers given for the full text equally concern the articles that only respond to the query on a content level (e.g. the article cibelinus in Blaise Medieval), those that respond to it regarding both content and headword (e.g. the two articles zizania in the Blaise Patristic) and those that only respond to it on the level of their headwords.

For each dictionary, a label **More...** is located to the right of the two fields with responses.

By clicking on the one that corresponds with the criterion **Dictionary Headwords** for the work of your choice, you enter a second screen with results, which shows you the headwords concerned, followed by an extract of their article comprising two lines at the maximum. If the article is short enough to fit exactly in the space of two lines, the text ends with a full stop; otherwise it ends with three suspension points. Each screenful shows a maximum of 25 responses, but you can switch from one screenful to another by means of the arrow buttons.

At this stage, you still have two ways of conducting your search; you can click on either one of the two links located to the right of the name of each dictionary entry in the list of results, and labelled **Preview** and **All Details**, respectively.

By choosing **Preview**, you open a window which shows you the **article** in question; you also obtain the same information and links that are provided in a search by **Dictionary Headword**, **CTLO Lemmas** and **CTLO References** in the DLD section **Indexes** (cf. above, p. 27).

If you click on **All Details**, the article is presented to you in the same manner as in the screens of the results of the Quick Search and the Advanced Search (cf. p. 19).

The link **More...**, located next to the criterion **Full Text** of a given work, works essentially in the same way as the link corresponding with the criterion Dictionary Headwords. The only difference is that here the extract shown does not necessarily coincide with the start of the article, but always contains one or more terms which respond to the query, marked by a yellow-coloured background.

Here, too, you can choose between the links **Preview** and **All Details**, whose workings and characteristics are identical to those of the links of the same name for the Dictionary Headwords.

This dictionary project was set up many years ago, at that time located at the Université Catholique de Louvain à Louvain-la-Neuve, with the support of the Fonds National de la Recherche Scientifique de Belgique. Let me pay tribute here to the relevant officers at the FNRS and everyone who, at one time or another, has helped with this project. The Belgian Comité National du Dictionnaire du Latin Médiéval has over many years put computing at the heart of its activities and, following in the footsteps of the FNRS, has contributed to the present publication. We wish to thank the various officials in the government bodies and we hope that the various medieval dictionaries produced under the patronage of the Union Académique Internationale will in due course enrich this DLD. The realization of the DLD has been the responsibility of the CTLO (Centre Traditio Litterarum Occidentalium) in Turnhout. Particular thanks goes to Véronique Suys and Eddy Gouder, without whom we would have got nowhere; they have spared neither time nor energy and everyone is indebted to their efforts. We wish also to thank Philippe Demonty, who works essentially under the patronage of the Comité national du Dictionnaire du Latin médiéval, and Joseph Longton, for their respective contributions. The computer programming has been undertaken by Jeroen Lauwers, the programmer within CTLO and the deviser and designer of this new version of the DLD. He also deserves our full credit, as too, of course, the editors of Firminus Verris and of Guillaume Le Talleur, Brian Merrilees and William Edwards, as well as Anne Grondeux, the editor of the Latin to French Glossary of Montpellier.

Paul TOMBEUR

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