Logology: Aspects of the Lexicographical Description of Euroclassical Word-Formation Items.

The classical languages Greek and especially Latin have long survived the historical context of classical antiquity and are still in a very real sense an integral part of language growth and transition both in Europe and beyond. Some indication of the longevity and diversity of Latin is given by the lexicalised attributes used to differentiate between various stages and types of the language, such as Classical Latin, Late Latin, Medieval Latin and Neo-Latin, or Vulgar Latin, Dog Latin and Macaronic Latin. For present purposes, the most important of these Latins is Neo-Latin, which in the statutes of the International Association for Neo-Latin Studies (IANLS) covers “all writings in Latin since the dawn of humanism in Italy from about 1300 A.D., viz. the age of Dante and Petrarch, down to our own time”¹ Neo-Latin, which consciously looks back to Classical Latin and has a strong admixture of Greek, was not only one of the main vehicles of the belles lettres in post-Renaissance Europe, long complementing and competing with the various European vernaculars as a literary language. It was also for centuries the lingua franca of scholars and scientists throughout Europe and beyond until largely replaced by the respective vernaculars. The transition from Neo-Latin to vernacular took place at different times in different ways in different European countries, but everywhere it has left an indelible imprint on those vernaculars and everywhere it continues to make a major contribution to their lexical growth, in scholarly and educated usage and quite particularly in scientific terminologies and nomenclatures. These latter are international in scope, and Neo-Latin underpins what Merriam-Webster’s Third New International Dictionary has dubbed ‘International Scientific Vocabulary’ (ISV). With the global spread of western science

and technology, the influence of vernaculars such as French, Spanish and now above all English with their learned Graeco-Latin and Neo-Latin lexical patrimony is likewise spreading well beyond Europe. This influence raises new issues and poses new problems for non-European languages and language communities.

The processes of language growth and transition hinted at here, and especially the role of classical and neo-classical lexical developments and influences in these processes, form the general backdrop to the present paper. It focuses specifically—and this might serve as a long title—on word-formational aspects of the on-going euroclassical influences on the lexical development of selected modern European vernaculars and on problems of their linguistic description, especially in lexicography. Its short title is ‘Logology’.

Logology may be defined as the study of words, or as the New Shorter Oxford English Dictionary puts it: ‘The branch of knowledge that deals with words’. It thus follows the analogy of other -logies—or is it -ologies?—like anthropology or psychology. It is not in common use, unlike its established synonym lexicology. Here I want to take the initial item log(o)—literally and interpret logology as the study of log. Such a study requires first and foremost a collection or inventory, or indeed an anthology or catalogue (cf. monologue dialogue) of words containing the item log. The list of ologies—itsl now lexicalised—from astrology to geology to zoology is long and seems to be ever expanding with new attestations such as weatherology (cf. meteorology), cosmetology, escapology, happyology and chaology, kiddology, sudology and odontopedology. These ologies are accompanied in most cases by word families including at least members in -logical and -ologist, e.g. lexicology, lexicological and lexicologist, zoology, zoological and zoologist, but cf. astrology, astrological and astrologer, or theology, theological and theologian, or indeed logical, logic and logician. We could carry logophilia (cf. philology) to the extremes of logomania, but at the risk of logorrhoea and logomachy, so let us return rather to the subject of

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2 Some examples taken from Tom McArthur (Ed.), The Oxford Companion to the English Language, Oxford, New York, 1992, p.218. The Companion contains a number of important entries on our topic, as well-written as they are well-informed, e.g. classical compound, combining form, complex word, compound word, Greek, Latin, word-formation. Further examples of nonce-ologies can be found in the OED under -logy and -ology.
our study \( \text{log} \), or better \(-\text{log}-. \) The hyphens serve to indicate that \(-\text{log}- \) is a bound item always used in combination with other items to form words, while its homonym \( \text{log} \) is a free-standing noun or verb of quite different origin.

The study of \(-\text{log}- \) must start with a study of the combinations in which it occurs. These have a number of immediately apparent features. First, they are complex morphological items which can and must be analysed or decomposed into (meaningful, morphological) segments. I return to questions of morphological structure and analysis in more detail below. Secondly, they may belong to different registers in that some are in common use, others may be restricted to educated or even technical usage, while others again strike one as jocular or ironic formations. Thirdly, the items that \(-\text{log}- \) combines with may be of vernacular or (ultimately) classical origin. Indeed, there seems to be a definite link between origin and register with vernacular: classical combinations often being used for jocular or ironic effect. Be that as it may, a combination with wholly classical components is very frequently common to several or many European languages. The ologies from anthropology to zoology to denote branches of knowledge may serve as examples. Such words may be labelled europeanisms, or more precisely: euroclassicisms. A working definition of euroclassicisms might be 'words of ultimately Graeco-Latin or classical origin which occur in congruent form and with equivalent meaning or meanings in more than one European vernacular from more than one language family'.

Three main reasons may be given for a study of euroclassicisms. First, they are often key words of the European cultural and intellectual tradition and function as signals and symptoms of that tradition. The tertiary and in large measure the secondary curriculum would be unthinkable without them, and they form the core of scientific and scholarly vocabulary. Secondly, they are also key words in interlingual and intralingual communication, especially as the specialised scientific and technicolological terminologies impinge more and more on general educated usage and even on the common core vocabulary. Because of their essential Europeanness—and indeed internationality—they can on the one hand help facilitate communication between representatives of different language communities, especially in scholarship and science. Because of their often specialised, technical nature—and because of their morphological complexity—they can on the other hand hinder communication between representatives of the same language community, especially between academics or scientists and lay people; they can be hard words constituting
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a lexical bar within the language community. Thirdly, they represent a challenge to the linguist because of the difficulties of description endemic to their study, the (resulting?) comparative neglect of euroclassicisms in linguistics, and the (resulting?) deficiencies in their linguistic description.

To illustrate the difficulties of description let us take but one aspect among many—etymology. An English euroclassicism could be borrowed from Classical Greek, either directly or through an intermediary, usually Latin. It could be borrowed directly from Latin, but we would need to establish whether it was borrowed from Classical, Late, Medieval or Neo-Latin. It could be borrowed from another of the modern European vernaculars, where in turn it might be either a borrowing from Latin and/or Greek, a borrowing from another vernacular, or a coinage on a Graeco-Latin basis. Or it could be newly formed in the domestic tradition wholly or largely from components of Latin and/or Greek origin on a word-formation pattern developed in Latin and/or Greek, in Neo-Latin or in a vernacular. Clearly, to establish any one etymology as possible or likely, let alone to prove a given etymology, a paneuropean approach not restricted to one specific language is essential. However, the few in-depth studies of euroclassical words, word families and word-formation items and patterns based on an independent study of original sources that are available are usually restricted to one particular vernacular. As indeed are the comprehensive, scholarly, historical and etymological vernacular dictionaries based on textual evidence that are the main sources of information on euroclassicisms, not least on their origin and development. Such dictionaries are not only necessarily language-specific, they also differ very markedly from one national tradition to another. Thus it is difficult to gain a truly European perspective on a given lexical item by comparing the information in dictionaries of different vernaculars and trying to build up a composite picture of the item in question, e.g. to establish common features or differences across vernacular boundaries.

A common problem facing all lexicographers tracing the etymology, i.e. the origin and history, of euroclassicisms in whatever vernacular or vernaculars is posed by the documentation of Greek and Latin as the (ultimate) source languages. Less so, perhaps, with Classical Greek and Latin; but more so with Medieval Latin, and most certainly with Neo-Latin. The neglect of Neo-Latin today seems to be as European a phenomenon as its use was formerly. The few available studies which include a consideration of Neo-Latin sources in the original reveal just how
serious this neglect is. Neo-Latin is the missing link in the chain of any investigation into the etymology of euroclassicism, of euroclassical words and word families, word-formation items and word-formation models and patterns.

For reasons such as these, we need to be cautious in the claims we may make and the conclusions we may draw from the evidence available to us, and we need to temper our criticism of the current inadequacies in the linguistic treatment of euroclassicism, not least in lexicography. Constructive criticism, however, might help overcome the inadequacies and improve the treatment. It is in this spirit that the following observations on aspects of the linguistic, in particular the lexicographical description of euroclassical word-formation items are offered. They focus specifically on the morphology of the item -log-, first looking briefly at some characteristics of -log- as an item and then considering its treatment in selected vernacular dictionaries.

As even the small inventory of -log-combinations given above indicates, the vast majority of the morphologically complex lexemes in which -log- occurs are neither compounds nor derivatives as traditionally described in morphosyntactic terms. A compound may be described as a combination of two free forms or lexemes, a derivative as a combination of a free form or lexeme as a base and an affix, either a prefix or a suffix. Other types of non-affixal derivation can be ignored here, but many questions remain. What is the morphological status of -log-combinations such as graphology or logography, logophilia or philology, or logology? How are they to be analysed: graph-o-log-y or grapho-logy or graphology, log-o-graph-y or logo-graphy (or log-o-phony)? If we leave aside consideration of the medial -o- as a thematic or connective vowel, sometimes also called an interfix, we are left with questions on the morphological status of components or constituents such as -log-. Preliminary observations indicate that it is a bound form, occurs in regular series of combinations (in different semantic functions) in both initial and final position, and may combine with a lexeme, an affix or with other similar items such as graph or phil to form a word. It is thus neither a...
lexeme nor an affix as traditionally defined. As an item -log- is an abstract entity, realised in forms such as log- or logo- in initial position and -logy, -logical and -logist among others in final position. Turning now to lexicography, we can ask how -log- or its realised variants is treated in vernacular dictionaries.

The following consideration of the lexicographical treatment of -log- variants is necessarily restricted in scope. It is concerned only with the word-formation items as such, not the combinations in which they occur. It is based on selected dictionaries only, especially on well-known, scholarly, historical and/or etymological dictionaries, which belong to very different lexicographical traditions and contexts. It covers but three European vernaculars, German as a representative of the Germanic languages, French as a representative of the Romance languages, and English as a mixed language sui generis, certainly in lexical terms. The individual dictionaries are not characterised in any detail (size, coverage, intention etc.), least of all the English ones. The individual entries on -log- are not reproduced or quoted in full. Only the information on the morphological status of -log- is paraphrased or quoted in excerpt with abbreviations written out and the typography partially adapted. The information is commented on only briefly—the range and diversity of description and the many questions this leaves open provide their own best commentary.

English

The Oxford English Dictionary (OED) Oxford 1933, 21989.

The following log- variants appear as head words for concise, but informative articles on the history of the use of the items in English, sometimes with contrastive reference to the Greek etyma:
- loger: described as an “ending” with further amplification that “the suffix is no longer a living formative”.
- logian: “ending”.
- logic, -logical: “endings”
- logist: “ending”, with further amplification that “it is now the only living formative with this function”.
-logue: “ending”, with the remark that designations of persons with this ending are now little used, “derivatives” in -loger, -logist or -logian being commonly preferred.
- logy: “ending”, with mention of “terminal element” referring to Greek usage only. There is also a note on the “suffix -ology”. (-ology, ology
are also given a separate entry at the letter o as “suffix and quasi-substantive” with the article on the suffix also referring to “the suffix -logy”).

We may note, first, that log(o)- is not lemmatised as such, as opposed to logico-: “taken as combining form of logic, logical”. Secondly, that “formation” is the generally preferred term for the log-combinations mentioned in the articles, but that “derivative” is also found, reinforcing the occasional references to the endings as suffixes. Thirdly, that Greek combinations with -log- are referred to as “compounds” in the entry on -logue and as “derivatives” or “compounds” in the article on -logy.


This is very much a condensed version of the OED with corresponding articles on the following main lemmas:
-loger: “word-ending” and “ending”
-logian: “ending” -logic, -logical: “endings”
-logist: “formative”
-logue: “ending”, with the further information that “derivatives” in -loger, -logist, or -logian are now preferred.
-logy: “ending”. (-ology, Ology are also entered separately as “suffix and quasi-substantive” with reference under the suffix also to “the suffix -logy”).

We may note that neither log(o)- nor logico- are lemmatised.


This is an independent work based on OED materials but not a condensed version of the OED. The following items appear in alphabetical order as head words:
-log: “suffix” (cf. -logue)
-loger: “suffix”
-logic: “suffix”
-logical: “suffix”
-logic-o-: “combining form”
-logist: “suffix”
-logue: “suffix”(also -log)
-logy: “suffix”
-ologic: “suffix”
-ological: “suffix”
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-ologist: “suffix”
-ology: “suffix”
We may note that log(o)- is not lemmatised.


This single volume dictionary contains the following entries:
-logist: no information is given on morphological status, but -loger and
-logian appear as sublemmas, again without further information”
logo-: “combining form”
-logue, U.S. -log: “ending”, with reference to “derivatives” in -loger,
-logist, -logian being generally preferred and to -logist being “the living
formative”.
-ogy: no information is given on morphological status, but -logical,
-logic and -logist appear as sublemmas, again without further information.
We may note that log-combinations are generally referred to as “formations”.


The following items are entered as main lemmas with very concise articles:
log- or logo-: “combining form”
-logia: “combining form”
-logue or -log: “combining form”
-logy: “combining form”


-logy: “combining form”
-ology: “combining form”

On this evidence, which would need to be and indeed can be substantiated by reference to more items and more dictionaries, English-language dictionaries systematically lemmatise word-formation items such as -log- and usually accord them both main lemma status in the dictionary macrostructure and a microstructural description of their status, history, meaning and use consonant with that given to lemmatised lexemes according to the size, coverage, intention etc. of the individual dictionary. The number of items lemmatised varies somewhat, the description of their morphological status considerably more so. The American dictionaries
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(quoted here) lemmatise fewer items, but consistently describe them as "combining forms". The English dictionaries lemmatise more items, at least those used in final position, but the description is more inconsistent. For the few items in initial position, "combining form" is the preferred term; certainly "prefix" is never used. With those in final position, the Oxford dictionaries traditionally show a strong preference for "ending", with some instances of "suffix" in the articles themselves. The NSOED breaks decisively with this tradition by using only "suffix". Interestingly, this development runs directly counter to the policy of the new, thoroughly revised, 8th edition of the Concise Oxford Dictionary (COD) 1990, which lemmatises -loger, -logic (also -logical), -logist, -logue (US -log), -logy and -ology and consistently labels them all "combining form". We are left wondering at the question, what policy will the current revision of the OED itself follow?

German

German lexicography presents a radically different picture with euroclassicisms formerly excluded on principle from general monolingual dictionaries of German and treated in special dictionaries of foreignisms (Fremdwörterbücher). Nor were bound word-formation items generally lemmatised and described as such, neither those of native German stock nor still less those of foreign origin. In contrast, information on native lexemes as used in compounds was included. Consequently, neither Grimms' Deutsches Wörterbuch (DWB) and Trübner's Deutsches Wörterbuch nor older editions of Paul's Deutsches Wörterbuch and Kluge's Etymologisches Wörterbuch offer anything on our topic, although the DWB does include some foreignisms under some letters of the alphabet. Nor is Schulz/Basler's Deutsches Fremdwörterbuch helpful, except as a source of historical information on foreignisms, especially classicisms. In recent decades, however, there has been a change in policy. New dictionaries and new editions of established dictionaries now include foreignisms as a matter of course in their description of German vocabulary, and some—including the new edition of the DWB—give more attention to bound word-formation items, native and foreign alike. Nevertheless, we still have to cast our net far and wide for a catch of log-variations lemmatised as word-formation items, and their description still shows all too obvious signs of long puristic neglect.
**Duden Das große Wörterbuch der deutschen Sprache (GWB) Mannheim, Wien, Zürich 1976-81.**

This is principally a synchronic dictionary of modern German, but it does contain some historical information, mainly in the form of etymologies. The following log-variants are lemmatised:

- **logo-, Logo-**, also **log-, Log-** (before vowels): appear as sublemmas in a nest article headed by the lexeme *logo* and are labelled “determinans in compounds”.
- **-loge**, (less frequently) **-log**: main lemma with the information “in compounds”.
- **-logie**: main lemma, “in compounds”.

**Kluge-Seebold Etymologisches Wörterbuch der deutschen Sprache (EWB) Berlin, New York 221989:**

This one-volume dictionary contains the following main lemmas:

- **-loge**: “suffix”
- **-logie**: “suffix”

In both cases, combinations are labelled “formations”, unless Greek usage is being referred to, in which case “compounds” is used.

**Pfeifer Etymologisches Wörterbuch des Deutschen (EWD) Berlin 1989.**

This new three-volume work from the former GDR includes discursive information on the following entry:

- **-loge, -logie**: “compound elements”

**Der Große Duden. Das Herkunftswörterbuch (Duden-EWB) Mannheim, Wien, Zürich 21989.**

A concise one-volume work with the following main entry:

...**loge**: “determinatum in masculine noun compounds”, with a subentry on ...

...loge as a “determinatum in feminine noun compounds”.

On this sparse evidence, few word-formation items like -log- are lemmatised in German dictionaries and, if they are, their description is at best inconsistent. Reference to further such items in the dictionaries mentioned here or to the few other dictionaries that lemmatise bound forms would serve only to reinforce this evidence, indeed to reveal inconsistencies and even contradictions within one and the same dictionary. Clearly, on
this one particular issue of the morphological status of euroclassical word-formation items, German lexicography currently lags well behind English lexicography—and French.

French

French dictionaries, like their English counterparts, systematically lemmatise word-formation items such as -log- and give full, well-documented information on them. The following selection includes only some larger, present-day dictionaries featuring a historical-diachronic approach or dimension. It excludes, however, Wartburg's *Französisches Etymologisches Wörterbuch* (FEW), which on this particular topic is disappointingly uninformative and derivative.


Only one item appears as a lemma in the alphabetical order of this multivolume dictionary:

$logo-$: “first element” in the “composition” of learned words.

However, a detailed introduction on the lexicological foundations of the dictionary includes a lengthy article on *logie, logue (logiste)* which are labelled “elements”. Combinations are generally called “compounds”, even though *logie* and *graphie* are once referred to as “bases”.


This nine-volume work contains the following main entries on *log*-variants:

*logico-*: “prefix”

-*logie, -logique, -logue*: “elements” used in “composition”, with further information on the “suffix” -logie, the “suffix” -logique and the “suffix” -logue with the “suffixes” -loge, -logien, -logiste and -logisme as sublemmas. Of these, only -logiste has an entry in the main alphabetical order with a cross reference to -logie.

*logo-*: “first element” of learned words, with a cross reference to the “suffixes” -logie, -logique and -logue and a reference to *logo-* combinations as “compounds”.

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Vol.X 1983 of this multivolume work still in progress contains detailed entries featuring numerous combinations with the following log- variants listed as main lemmas:
- logie: “formative element”, with the “element” -logique as a sublemma
- logien: “formative element”
- logiste: “formative element”
- log(o)-: “formative element”
- logue: “formative element”.

We may note that these “elements” are used in the “construction” of (learned) words and/or in borrowings and that -logique is etymologised as an element derived from log(o)- and the suffix -ique and -logiste as derived from log(ie)- and the suffix -iste.

This two-volume work features the following main lemmas:
- logie, -logue: “suffixal elements”, with further information on the “suffix” -logie and the “suffix” -logue and with -logien, -logienne and -logique as sublemmas, only the last of which is labelled “suffix”.
- logo-: “prefixal element” present in “compounds”.

We may also note under the main entry logique the sublemma logico-: “element” used in the formation of “compounds”.

On this evidence, which can be substantiated with reference to other bound items similar to -log-, French dictionaries generally have a strong preference for “element” as a generic term sometimes further specified by “formative”, “prefixal” or “suffixal”, with the Robert dictionaries also using “suffix” or more rarely “prefix”. These elements are used in the “construction” or “formation” of complex lexemes, which are sometimes labelled “compounds”, but not “derivatives”. In the TLF different descriptions were used for items similar to -log- until “formative element” was settled on as editorial policy. French dictionaries show a stronger tendency to group the items together than their English counterparts. As with English dictionaries, on the other hand, the number of items lemmatised varies to some degree, while the description of their morphological status varies more widely.

I shall not enter into interlingual comparisons. They would remain limited at best because of the different traditions and contexts the
dictionaries belong to, above all the German works. They would also assume that the item under discussion, \(-\log-\), had the same or similar morphological status in the various vernaculars. This assumption is justified as a hypothesis, but would need to be tested against much more empirical evidence. Even so, we may fairly conclude on the evidence considered here that the lemmatisation and even more the description of the morphological status of realised variants of \(-\log-\) are at best surprisingly varied, at worst inconsistent and even contradictory. Generally, the dictionaries operate within the traditional terms of composition and derivation or affix and lexeme, with only “combining form” in English and “formative element” in French, this latter seeming very generic and non-specific, really pointing beyond those traditions as far as the bound items are concerned and without any corresponding (new) term for the combinations. On this evidence, which is restricted, but symptomatic, the traditional and current lexicographical treatment of such euroclassical word-formation items must be regarded as inadequate and as needing revision. It would go well beyond the scope of this study to investigate whether and to what degree this judgement holds good for other aspects of the description of euroclassicisms, be they phonological, etymological, semantic or pragmatic. Such an investigation would require more items from more dictionaries from more European vernaculars as well as the classical languages.

A more adequate treatment of the morphological aspects considered here would require a consistent description based on well-defined categories that go beyond compounds and derivatives, lexemes and affixes as traditionally understood and cover combinations such as \(\text{logology}\) and bound items such as \(-\log-\).\(^4\) To establish such categories would require comprehensive inventories of combinations with \(-\log-\), including lexicalised and non-lexicalised or nonce forms, specialist and general terms, archaic, historical and current usage. Such inventories would need to be trans- or multilingual and to consider not only European vernaculars, but also Greek and the various Latins, quite particularly Neo-Latin. This is a daunting task, especially as it covers but one aspect among others of a study of euroclassicisms. But I have indicated at the outset some reasons why I consider such a study both necessary and worthwhile, not least in

view of the on-going contribution of the classical lexical patrimony to language growth and transition in Europe and internationally.

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