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THE LANDSCAPE OF LEXICOGRAPHY

This book consists of a series of papers that look at three different aspects of the landscape as seen in dictionaries from across Europe. Multilingual diachronic case studies into lexicographical descriptions of flora, landscape features and colours concentrate on three supposedly simple words: daisies (*Bellis perenis* L.), hills and the colour red. The work is part of the ongoing LandLex initiative, originally developed as part of the COST ENeL - European Network for e-Lexicography - action. The group brings together researchers in lexicography and lexicology from across Europe and is dedicated to studying multilingual and diachronic issues in language. It aims to valorise the wealth of European language diversity as found in dictionaries by developing and testing new digital annotation tools and a historical morphological dictionary prototype.

THE LANDSCAPE OF LEXICOGRAPHY

Alina Villalva & Geoffrey Williams (eds.)

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... autre, quand ils sont de même *païs*. ainsi ils disent, bon jour *païs*, adieu *païs*; pour dire, bon jour un tel, adieu un tel.

P A I S A G E. f. m. (Prononcez *peïfage*, de quatre syllabes.) Aspect d'un *païs*; le territoire qui s'étend jusqu'où la vue peut porter; où étendue de *païs* que l'on peut voir d'un seul aspect. Les beaux *païsages* sont ceux qui sont diversifiés par quantité d'objets agréables à la vue, comme des collines, des vallées, des campagnes, des prairies, des bois, des vignes, des maisons de plaisance, des villes, des bourgades, des haumeaux, des sources, des ruisseaux, des rivières, & enfin la mer même. Plus il y a de ces divers objets dans un *païsage*, & plus il est beau.

P A I S A G E, se dit aussi des tableaux où sont représentées quelques vues de maisons, ou de campagnes. Les vues des Maisons Royales sont peintes en *païsages* à Fontainebleau & ailleurs.



DICIONARÍSTICA PORTUGUESA – VI

THE LANDSCAPE
OF LEXICOGRAPHY

Alina Villalva & Geoffrey Williams (eds.)

CENTRO DE LINGUÍSTICA DA UNIVERSIDADE DE LISBOA
CENTRO DE LÍNGUAS, LITERATURAS E CULTURAS DA UNIVERSIDADE DE AVEIRO

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A last word is due to the audiences that have so warmly received the presentation of our research activities and have manifested their willingness to join us. We hope to welcome you in a very near future.

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SYMBOLS AND ABBREVIATIONS

> and <	derivation (with or without phonetic changes)
→ and ←	phonetic evolution only
ADJ	= adjective
ADV	= adverb
AG	= Ancient Greek
BP	= Brazilian Portuguese
Brus.	= Belarusian
Bulg.	= Bulgarian
Croat.	= Croatian
CMG	= Common Modern Greek
Dan.	= Danish
dial.	= dialectal
Engl.	= English
EP	= European Portuguese
ER	= European Roots
Est.	= Estonian
Fr.	= French
Germ.	= German
HelG	= Hellenistic Greek
HG	= High German
IE	= Indo-European
It.	= Italian
Kash.	= Kashubian
Lith.	= Lithuanian
LG	= Low German
Med. Lat.	= Medieval Latin
MLG	= Middle Low German
MG	= Modern Greek
N	= noun

Nf	= feminine noun
Nm	= masculine noun
Nn	= neuter noun
Pol.	= Polish
Pl	= plural
Port.	= Portuguese
Rom.	= Romanian
Russ.	= Russian
Serb.	= Serbian
Sloven.	= Slovenian
Sorb.	= Sorbian
Sp.	= Spanish
SMG	= Standard Modern Greek
Swed.	= Swedish
Ukr.	= Ukrainian
V	= verb

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Preface

Philip Durkin

LandLex is an exciting project in which I wish I had had the chance to be involved more closely. It has managed a rare thing, bringing together, in a genuinely collaborative project, a group of scholars with an interest in etymology from many different parts of Europe. In so doing, it has shone a light on the various approaches to shared questions that have been adopted in different national traditions. In itself, this is important, and happens all too rarely. Sometimes, just being aware that people elsewhere have mulled over similar problems, and seeing the similarities or differences in the approaches they have adopted, can be an important first step to finding new ways forward.

But this project has done more than that, in trying to see what happens if a broad comparative perspective across many different parts of Europe is taken in investigating lexical histories from a basically semasiological perspective: essentially, what name(s) do people have for a particular entity (or group of related entities) in different European languages, and what do we learn when we investigate the histories of these names?

A book with a section with the refreshing and heartening title “What do lexicographers need to know about plant names?” brings us right back to the centrality of *Wörter und Sachen*, words and things, in both lexicology and philology.

How high is a *hill*? What shape is it? What colour is it, and what sort of vegetation is it covered by? Which plant do we call a *daisy*? (As it turns out, many different plants.) Is there a prototypical daisy? Typically, the answers to

these questions involve relationships with other words in the same lexical field (*mountain, hillock, mound, tump, rise, slope*, etc.). Where there have been changes in the meaning over time, have these changes been influenced by introduction of new words to the lexical field, for instance through borrowing from other languages? What impact have cultural developments had, for instance through the development of a literary tradition, or the need to describe new landscapes – often earliest in the context of Bible translations?

If we then compare the words for ‘hill’ or ‘daisy’ across a range of different European languages, what do we learn about cultural similarities or differences? Sometimes, we may find that the same wordstock has developed differently in different places. Sometimes, that words of different origins have shown similar histories as they are employed to fulfil similar needs.

Practically, how can we unlock such information from a plethora of dictionaries, and extract key data on a principled basis with a focus on questions of etymology and word history? This book suggests ways forward, and shows what great things can result when etymologists connect.

I. LandLex: the description of lexical variation through in-depth case studies

Geoffrey Williams & Alina Villalva

Language describing the landscape has always been present in dictionaries, both historical and contemporary works. However, as with all dictionaries, descriptions vary greatly in depth depending on the perceived audience and scope of the dictionary concerned. Whilst there is a myth of lexicographical neutrality, only really applicable in contemporary lexicographical practice, it is inevitable that different periods, different languages and different cultural outlooks will highlight different aspects of word meanings. This heterogeneity is part of the wealth of the European language heritage, and that is something the LandLex research group sets out to investigate.

The landscape is central to our daily lives, but our picture of it and the interpretation of the words we use to describe its features are far from neutral. We might be able to have a reasonably acceptable definition of say 'hill', but what we actually mean by it is conditioned by local geographical knowledge. Quite simply, a 'hill' looks different in a low-lying country as opposed to a 'hilly' country which may have high mountains. Where hills stop and mountains begin is not clear-cut. Coupled with this is what colour we perceive hills as having. English children learn the hymn "There is a green hill far away" referring to Golgotha, which is anything but green. It is simply that to the English mind-set, hills are green. This perception is not shared across Europe. What can be said about hills holds true for valley, rivers, woods, forests... as well as flora and fauna with many species being missing in either the hotter, or cooler parts of Europe. Dictionaries may help, but they address essentially a national audience that already 'understands',

what is missing is a bridge to other languages. A bilingual dictionary could be a bridge, but the simplicity of translation equivalents brings the danger of believing that one word, and its associating meanings, simply maps onto another.

The next problem is how these features are actually perceived. Rivers and mountains can be seen in a variety of ways, including as barriers, while hills and mountains can be places of refuge or places of danger. Such information is captured in literature and folklore, but these are highly dispersed sources, it is dictionaries that try to encapsulate the picture through definitions, but also through the examples chosen to illustrate word usage.

The language we use reflects geographical features, but also linguistic ones. 'English' has a word for 'hills', but no word for 'mountains', so it borrowed one from French. It also has a plethora of other words from Scandinavian languages to describe mountainous features that really only appear in the north and west of the country and therefore were beyond the language experience of most people until areas as the Lake District were 'discovered' in the 19th century and made accessible through the railway. No language can be seen in isolation. Estonian has had a strong German influence for centuries. Latin, either as the language brought by the Roman Empire, the Church or through its central role in learning has had a major affect on all romance languages, and others. Romanian, a Romance language has been influenced by its neighbouring Slavic languages amongst others. This is only to remain within Europe, but obviously the wider world has contributed too. To understand this variety, dictionaries provide etymologies and word histories, but each history is locked into the language of the dictionary and ideally we need to share this common European experience.

The Landlex research group, formed in 2016, gathers researchers of various backgrounds and languages that aim to construct an original research strand based on strategic guiding principles of lexicology and lexicography, around ideas of the landscape lexicon. In terms of a networked research team, LandLex team is a particularly successful outcome from European Network for e-Lexicography COST action as geographically and thematically spread researchers came naturally together to look at one particular research object thereby creating a truly pan-European

perspective. The LandLex European coverage spreads from Russian in the East to Ireland in the West, from Estonian in the North to Greece and Portugal in the South. This allows us a wide vision of European linguistic and cultural variation. At the outset, LandLex brought together a number of important threads that were developing within the ENeL action, notably work on plant names in Latin and the vernacular, research on diachronic word change, the cultural heritage in romance dictionaries and lexical variation. By concerting and exploring commonalities, it quickly became that all the threads would be brought together so as to explore in depth a single theme: the language of the landscape as seen through essentially monolingual, dictionaries.

The landscape is a very broad area and our aim is not to map this entire area, but to go into depth on specific areas. Thus, the point of departure was simply the words 'paysage' and 'landscape', two words, one in French, one in English, but Dutch in origin, that appeared pretty much at the same point in time to describe a format of paintings, and to an extent the contents of those works of art. The terms 'portrait' and 'paysage/landscape' still refer to formats, but many users fail to see that they are simply polysemic with the wider notion of art or of a limited view on a particular theme. The word 'paysage' is interesting to follow in dictionaries as it gradually spread across romance languages to reach Italian and Romanian only in the 19th century. Both words are equally of interest for their exploitations, and the fact that although etymological totally separate, the wider meanings developed on parallel lines. However, for LandLex 'paysage/landscape' is only a point of departure, the base lexis of landscape simply takes the collocates of the word in its artistic sense to define a basic list of words to explore.

The decision taken was to explore three groups of words; landscape features, wild flowers and colours that evoke the landscape. The list was as follows:

- Five landscape features:
 - hills, mountains, rivers, valleys and woods.
- The colours to be analysed are:
 - black, brown, blue, green, red, white, yellow.

- Selection of plants that can be found across Europe and plants that are more specific to certain environments
 - clover, dandelions, daisies
 - apple, olive and orange trees

These are of course the English words, when in reality LandLex seeks to have no hub language, but a network of interacting translation equivalents so that, for example, '*hill*' can be translated into a variety of words and not just one in other languages so that the real picture is far more complex than this simple list. In addition, words cannot be looked at in isolation, so that the notion of '*woods*' cannot be analysed without referring to coppices and forests. In terms of plants, the starting point has always been botanical Latin as this is the only means of gaining some stability when plant names can be highly confusing as different varieties are found in different climes. The naming of flowers draws heavily on dialects and folklore so that it is often far from easy to know what plant is actually referred to. Geographical variation plays an enormous role in naming plants, as will be seen in the chapter on '*daisy*' (*Bellis perennis* L.). In diachronic terms other difficulties arise as dictionaries are more or less exact in their descriptions and etymologies can be highly disputed. '*Bellis*' is a Latin word, but over time it has been used for a variety of different plants.

The restricted list is needed so as to carry out in-depth studies across a broad range of European languages and across time. The languages are those of the initial LandLex members, but as the group grows, other languages come in. Initially, thirteen languages were considered: a Romance group consisting of Catalan, Castilian, French, Galician, Italian, Romanian and Portuguese, a Slavic group with Polish and Russian, the Celtic fringe with Irish and Breton, Greek and German. This was respected in analyses, but not in the current work as not everybody has the time and the resources to do everything. For instance although we discussed Breton and Irish during work meetings, they are not represented in this work due to a number of constraints. Surprisingly perhaps, English does

not get an in-depth treatment as there is no scholar of English involved as yet, and in reality the starting point was French, rather than English.

Another important factor lies in the range of dictionaries under study because we seek witness dictionaries ranging from the sixteenth to twenty-first centuries, and these are not available for all languages. Monolingual dictionaries were chosen, as they are more discursive in nature, however, bilingual dictionaries also play a role, if only because these developed in most countries before monolinguals and therefore present earliest uses of many words. Bilinguals were also the only dictionaries in many lesser-spoken languages until comparatively recently. This was the case for Estonian where bilingual German-Estonian dictionaries dominate until the twentieth century and similarly for Irish and Galician. In countries as Romania, for instance, only in the mid-nineteenth century with an increasing realisation as to the importance of lexicography to national identity did full monolingual dictionaries appear. Other languages, as French, Italian or Portuguese have a much longer lexicographical history and benefit from the rise of major national, and increasingly encyclopaedic dictionaries from the seventeenth century onwards. Given the wide variety of situations, the LandLex solution is a pragmatic one.

Sixteenth century dictionaries are vital witnesses, but their definitions are often limited to a single synonym. It is in the seventeenth century that an enormous interest in dictionaries arose bringing about the first encyclopaedic dictionaries as that of Furetière (Furetière 1690/1701). This means that in some languages we have an unbroken list from the sixteenth century onwards whereas in others the record starts more recently and largely through bilinguals. This being the case for Breton and Irish as although there is a major monolingual dictionary of Irish, it is a politically recognised language, there is still none for Breton. In choosing the dictionaries for study, LandLex seeks to concentrate when possible on scholarly dictionaries and, for comparative reasons, take one witness dictionary per century. The aim is also to complement the list of dictionaries to be found in the European Dictionary Portal¹, one of the main deliverables from ENeL, by

¹ www.dictionarportal.eu/en/ (December 2018)

providing a Zotero database of legacy dictionaries used in the LandLex study. The difference lies in the fact that the Portal only contains fully digitalised whereas the LandLex resources are frequently in PDF at best. In order to carry rigorous analysis of dispersed data, LandLex has pioneered the use of Computer Assisted Qualitative Data Analysis Software (CAQDAS), tools originally developed for the social sciences and little known in the humanities. During the LandLex workshop held in Waterford in June 2017, a demonstration of the Atlas ti² system, Dr Steve Wright of Lancaster University and a leading consultant gave the software adopted by LandLex, in CAQDAS systems. In addition to CAQDAS, a limited number of entries were also encoded following the Text Encoding Initiative (TEI)³ as will be described in chapter III of this volume.

LandLex is concerned not just with a restricted lexis, but also in building methods for the exploration of legacy dictionaries and the proposing of new lexicographical models for e-dictionaries. Consequently, this volume concerns only three of the words under study: '*daisy*' (*Bellis perennis* L.), '*hill*' and the colour '*red*'. These three words were the object of several meetings and a training school all of which had as their aim the construction of a model that can be applied to other words from the LandLex lexicon. This volume is thus the result not only of different strands of research coming together around a common object, but extremely integrated work with interaction between all the teams involved. Common theme, the development of common research methods, and hence shared lexicographical resources and bibliography. LandLex is not simply a project but a research community.

The current volume

The book consists of five main sections, including this introductory section. The second main section outlines methodological roots for the analysis of language change overtime and methods for handling this variation within dictionaries. In

² www.atlasti.org/ (December 2018).

³ www.tei-c.org/ (December 2018).

this section, Alina Villalva demonstrates the need to build coherent word histories rather than pure etymologies. This is one of the main strands of the European Roots dictionary prototype and takes diachronic studies from a truly European perspective. LandLex is about studying data and making the results available in a new lexicographical model. This has been done through the use of the online Dictionary Management System Lexonomy⁴. Working closely with its creator, Michal Měchura, it has been possible to adapt the tool to the data thereby making the European Roots data more widely available.

The following section concerns both methodology and its application to the word '*hill*'. The underlying challenge here is to demonstrate language variation in space and time whilst developing a model that allows comparability between languages without imposing translation that would actually undermine the wealth of European language experience. By comparing languages, we also seek to isolate the base information that dictionaries should contain in order to define certain concepts whilst at the same time showing what is specific to a certain language community. Thus, the first chapter, by Geoffrey Williams, is essentially methodological in nature and introduces both the LandLex Zotero database and the use of the TEI for the experimental mark-up of dictionary entries in different languages of the project and the extraction of definitional information for the creation of a multilingual lexicographical prototype. We next have a series of case studies on '*hill*' in different linguistic regions. In the first of these studies, Iris Metsmägi & Vilja Oja, look at '*hill*' in Estonian dictionaries moving from strong influence of German bilingual dictionaries to contemporary monolingual dictionaries of Estonian that also describe dialectal variation. Ioana Galleron then discusses '*deal*' and '*colină*' as well as other words that designate the concept of '*hill*' in Romanian. The following paper looks at '*colină*' as a borrowed word in Romanian as well as its usage in French and Italian. An important issue raised is that of phraseology and how this colours usage of a word with purely language specific connotations. With '*Kholm, kholmik, kholmishche*', Kira Kovalenko details

⁴ www.lexonomy.eu/ (December 2018).

the variations in Russian descriptions of ‘hill’ and its diminutives and magnifying terms whilst showing the cross influence from other languages and the witness data from German and Greek legacy dictionaries. In this study, she shows the great variety of wordings, only some of which have survived into contemporary Russian. To end this section, Esperança Cardeira, Alina Villalva & Laura do Carmo takes us beyond Europe to Brazil to show how two countries which share the same language, but on two continents, have different landscapes to describe and a partially different lexicon to do it. This makes an interesting study of how an ex-colony and its mother language can remain linguistically close, but how specificities become essential in adapting language to environment.

Section IV brings us to the second LandLex keyword, ‘daisy’ (*Bellis perennis* L.) and the problem of naming and describing flora in dictionaries. This is not just about one plant name, but the whole issue of how flora, and by extension fauna, can be given accurate definitions and descriptions in dictionaries that go beyond Samuel Johnson’s highly laconic comments such as ‘a spring flower’ or ‘a kind of plant’.

The first chapter in this section ‘*Semantic Motivation of Plant Names as a Part of their Etymology*’, by Przemysław Dębowski and Jadwiga Waniakowa, details factors inherent in the naming of flora. This takes us beyond the neat descriptions of botanical Latin into the variety of names that plants received in their language communities based on factors as their appearance and their real or perceived properties. The second chapter, written and compiled by Alina Villalva from contributions from the entire LandLex team is an attempt to demonstrate language variation across the European area through comparisons and analyses of how this very simple flower is named, described and portrayed in phraseology. A simple word, but an extremely complex network of cross-influences with tremendous etymological confusion and often fairly disastrous treatment in bilingual dictionaries.

The final section looks at the third word chosen for this initial study: ‘red’. After the introductory section by Alina Villalva, Vilja Oja looks at ‘red’ in Estonian, a language that had in the nineteenth century two clear literary varieties each

with its own word for 'red'. In the chapter *'Modern Greek equivalents of 'red'*, Simeon Tsolakidis tackles the situation of how modern Greek has come about and how the colour words evolved from earlier varieties of the contemporary, as opposed to classical Greek. The chapter by Przemysław Dębowski, Alina Villalva and Esperança Cardeira brings in a truly pan-European perspective with mapping interactions between two European languages separated geographically and by language group. The fact that although widely different, the search for shared Indo-European etymons brings us full circle and back to the necessity to look at European roots.

Conclusion: From old books, new dictionaries

This volume is already an achievement in terms of creating a truly pan-European community concerned with clearly demonstrating the enormous wealth of the European language heritage through interaction and variation over space and time. LandLex is not concerned with so-called major languages and lesser-spoken languages, it puts all the languages of Europe on an equal footing so as to see how they have evolved and how they have interacted and continue to interact. It deals with a very small section of the lexicon, but in so doing endeavours to go into lexicographical issues in depth so as to create new and better models for dictionary analysis and new and better dictionaries. It seeks to show the importance of language variety and the importance of lexicographical tradition with the wealth of knowledge held within legacy dictionaries. Thus, the legitimate question is where we go next.

The obvious answer is that we continue to build the LandLex community, we continue to look at the other words in our restricted list so as to prepare the ground for a truly pan European vision of the lexis of the landscape. We are however more ambitious than that.

Legacy dictionaries, the works big and small that have forged the European lexicographical tradition are a source of knowledge and inspiration. From the 16th century onwards, dictionary writers, who did not yet know they were lexicographers,

and their allies the publishers and printers who helped forge these essential reference works, thought, published and innovated and thereby gave rise to the paper-based dictionaries and their digital counterparts of today. Legacy dictionaries, old books, are an enormous source of knowledge, particularly the great encyclopaedic dictionaries. Far from being restricted by a need for neutrality, the authors were free to give their opinions thereby giving fascinating insights into attitudes of the time. They contain lexical and encyclopaedic information that provide a window into the past. They contain vital information as to language change. They are a truly European heritage and must be made available for the European public, and not just as static images but as dynamic searchable resources that are open of access and not hidden behind firewalls. In showing the vitality of legacy dictionaries through deep analysis of key words, LandLex seeks to show their contemporary importance.

Old books to new dictionaries is more than only requiring that the European lexicographical heritage be made public, it is seeking inspiration. Earlier lexicographers experimented with new ways of providing information, which is why such dictionaries are far from standardised in the management of informational content. The constraint was the needs of the printer, but in the world of printing presses the publisher could experiment too. However, the act of encoding the formats and information in a computationally accessible form forces us to look anew at the data. It cannot be simply encoded using a standardising Dictionary Management System, the flexibility allows us to encode variety, but forces us to think about how to manage such disparate data, and that activity can help us rethink e-Dictionaries to go beyond the simple transformation from a paper to an onscreen format, thereby helping new dictionaries to come about.

New dictionaries also mean new ways of handling data. Analysis shows what is missing and what should be standard in lexicographical practice, notably in handling issues as flora and fauna. The cross-linguistic diachronic analyses carried out within LandLex have allowed us to experiment with new models such as European Roots. It has allowed us to develop new analytical methods for looking at image data using CAQDAS, and then full digitalisation using TEI-

XML. Multilingual lexicographical prototypes are offered as a means of making lexical variation apparent, of making information available without imposing a single language as a hub.

After three years of work, this volume shows what has been achieved so far though networking research into a common object. It is a demonstration of what has been achieved, and a starting point for future research and future collaboration.

II. European Roots: outline of a project

Alina Villalva

Most Portuguese contemporary dictionaries (paper editions as well as e-dictionaries) obey conservative models that are not significantly different from those of 19th century dictionaries. Their word lists still echo lexicographic approaches that other European languages have discarded over the 20th century, namely accumulation and a scarce incorporation of lexicological and lexicographic research. In fact, these dictionaries tend to incorporate, as exhaustively as possible, the information made available by their predecessors, regardless of the words' effective usage. Furthermore, the usage status of words is largely overlooked.

To illustrate these issues, consider the case of *abundar* 'to abound' in [INFOPEDIA]. It is presented as an intransitive verb, meaning 'to exist in a more than sufficient quantity' and 'to exist in a large quantity'; and as a transitive verb, meaning 'to have something in large quantity' and 'to agree'. It is assigned to a Latin etymon, the verb *abundare* that, according to [Lewis & Short], meant 'to overflow'. [PRIBERAM] doesn't acknowledge the intransitivity of the verb nor the meanings associated to that valence, and neither do most speakers, but there is more. Both dictionaries register, as an autonomous entry, the verb *abondar*, which, in fact, has been a graphic variant with 18 registers since the 13th century (cf. *Corpus do Português*): [PRIBERAM] redirects the reader to the entry *abundar*, but [INFOPEDIA] considers that it is a 'regionalism', making no reference of a relationship with *abundar*, though it redirects the reader to another variant (i.e. *bondar*), marked as 'popular'. *Bondar* is also listed in [PRIBERAM], as a word unrelated to the previous, though the meaning is similar – in *Corpus do Português*, *bondar* has 52 registers over a period of 800

years. Finally, both dictionaries list *avondar*, yet another phonetic/graphic variant of *abundar*, which has 24 registers from the 13th to the 16th century, and has had none since then. This time, [INFOPEDIA] redirects to *abundar*, while [PRIBERAM] gives *abundar* as its meaning. In sum, for a single verb, i.e. *abundar*, we find four different entries and no systematic information on their interrelationships.

Another issue regards the frequent inconsistency of information regarding word diachrony, morphological analysis and lexical semantics. The verb *enaltecer* ‘to praise’ is presented by [INFOPEDIA] as a derivative from the adjective *alto* ‘high’, and a loan from Spanish by [PRIBERAM]. One of these pieces of information is wrong, but the reader cannot guess which. Furthermore, [INFOPEDIA] lists as the first meaning of *enaltecer* ‘to make high’, but none of the 94 registers in *Corpus do Português* authorise such a gloss. If this was the argument to present the word as a derivative, then this might be the wrong hypothesis. However, the second hypothesis may be equally inaccurate. The Portuguese *enaltecer* might be a loan from the Castilian *enaltecer*, but it may also be a derivative from the adjective *alto* that has undergone a semantic shift from the original physical meaning in the source language (i.e. Latin *altus* ‘nourished, grown great, high, lofty, tall’) to the more abstract meaning ‘illustrious’, which is not documented before the 14th century. A similar parasynthetic derivation may have taken place both in Portuguese and Castilian, just like it may be a Castilian loan in Portuguese or even the reverse. In any case, readers should know that there is a morphological relationship with the more recent meaning of the adjective *alto* ‘illustrious’ and it might also be useful to link it to the equivalent Castilian word (cf. Silvestre & Villalva (2015: 98-100).

The above examples illustrate a common practice: (i) phonetic/graphic alternates are wrongly registered as different words; (ii) morphological alternates are not marked as such; (iii) morphological and etymological information may be conflicting and inaccurate; and, (iv) undocumented word meanings are improperly presented. The persistence of this kind of problem is certainly due to the fact that the main strategy for producing new editions or new dictionaries is of a commercial nature – a critical assessment and a lexicologically informed revision is incompatible with the need to produce new editions, whereas an increase of the entry list (by

accommodating neologisms that are not so frequently found, or specialized terms randomly chosen, or the introduction of orthographic updates) are welcome pretexts.

Since monolingual dictionaries present these kinds of shortcomings, what could be expected from bilingual dictionaries? Consider the Portuguese adjective *esquisito*. It is an obvious cognate of the Castilian *exquisito*, the French *exquis* or the English *exquisite*, but the meaning in Portuguese is diverse – it has undergone a semantic shift that has turned it into a negative property instead of the positive value that it originally conveyed, and which was retained in the other languages. [PRIBERAM]’s monolingual entry provides a series of meanings, seven in total. The first four (i.e. delicate, very good, rare, eccentric) are wrong; only the final three relate adequately to the actual meaning (i.e. bizarre)¹. The translations into Spanish, French and English reverse the order, but they convey the same mistake:

(1) PT *esquisito* – > SP²

1. *adjectivo* extraño; curioso; anormal; extraña

2. *adjectivo* exquisito

PT *esquisito* – > FR³

1. *adjectivo* bizarre; anormal; singulier; singulière

2. *adjectivo* exquis

PT *esquisito* – > ENG⁴

1. *adjectivo* strange; peculiar

2. *adjectivo* odd

3. *adjectivo* exquisite

[INFOPEDIA] provides the adequate meaning first (i.e. bizarre), in the monolingual dictionary, but it then also conveys two lines of the incorrect senses (i.e. extravagant, delicate, elegant, rare)⁵. The translation into French⁶ links *esquisito*

¹ www.priberam.pt/dlpo/esquisito (April 2018).

² www.priberam.pt/dlpo/Traduzir/ES/esquisito (April 2018).

³ www.priberam.pt/dlpo/Traduzir/FR/esquisito (April 2018).

⁴ www.priberam.pt/dlpo/Traduzir/EN/esquisito (April 2018).

⁵ www.infopedia.pt/dicionarios/lingua-portuguesa/esquisito (April 2018).

⁶ www.infopedia.pt/dicionarios/portugues-frances/esquisito (April 2018).

to 'bizarre, drôle, biscornu'; into Spanish⁷ 'raro, extraño'; into Italian⁸ 'strano, curioso, strambo, stravagante, bizzarro'; and to English⁹ 'strange, odd, funny, fussy, particular'. The bilingual assessments look even more lucid than the monolingual account, since they generally ignore the incorrect meanings. Apparently, [INFOPEDIA] has managed to redress a long and erroneous lexicographic tradition (cf. Silvestre & Villalva 2015), which is explicitly stated in the Spanish-Portuguese dictionary (s.v. *exquisito*)¹⁰. *Exquisito* is assigned to 'requintado, refinado ('refined'), (comida) delicioso ('delicious (food)'), (lugar) encantador ('charming (place)'), and it also mentions that the Spanish word should not be mistaken by the Portuguese word *esquisito*, which, quite surprisingly, is marked as 'rare'.

Usually, users of dictionaries such as these freely available, online works have no means to evaluate their quality and they generally grant them the credit that they do not deserve of conveying the truth about words. There is an urge to review, to expunge, and to consolidate on more solid grounds, but there is no easy way to achieve it. Therefore, a list of goals and methodological choices should be taken into account by any forthcoming lexicographic project. These goals should, at least, contemplate the following issues:

- dictionary entry lists must be critically selected
 - the number of words in a language is infinite, whereas dictionaries are finite sets of words – each dictionary corresponds to a selection of words that can not be the output of random choices;
- entries must provide thorough lexicographic monolingual descriptions
 - word knowledge is multidimensional – each dictionary project must decide which word features it will take into account and will systematically account for;
- a lexicographic model must be able to deal with multilingual issues
 - contrastive lexicography must rely on comparable monolingual tools.

⁷ www.infopedia.pt/dicionarios/portugues-espanhol/esquisito (April 2018).

⁸ www.infopedia.pt/dicionarios/portugues-italiano/esquisito (April 2018).

⁹ www.infopedia.pt/dicionarios/portugues-ingles/esquisito (April 2018).

¹⁰ www.infopedia.pt/dicionarios/espanhol-portugues/exquisito (April 2018).

Roots – a morphosemantic historical root dictionary prototype¹¹

Roots was an exploratory project that aimed to design a new lexicographic model based on the development of a morphosemantic historical root dictionary prototype. It was presented in Silvestre & Villalva (2014) and Villalva & Silvestre (2015). This dictionary sets out to be a user-friendly specialized dictionary, designed for linguists, lexicographers, translators, dictionary makers and language teachers, as well as other interested users, that should be able to consult it as a reliable source of lexical information – the necessary information and not more than that – to understand the nature of lexical items and their interactions. The following sections are devoted to the discussion of the two core decisions: the choice of roots and the choice of a historical and morphosemantic approach.

WHY ROOTS?

The uncountable set of words that form the lexicon of a language is probably made out of a relatively small and stable set of morphologically simplex roots. Yet, a list of roots or even a list of simplex words is hardly available for any language. This project has elected roots as target units for the prototype to potentiate coherence and feasibility – the list of simplex roots from Portuguese words should have a manageable size, which should facilitate the establishment of a stable methodological approach to the lexicographic description.

Defining roots as target units is, however, not enough. ‘Root’ is a changeable concept, requiring some further purposeful elaboration. Therefore, we decided to constrain the entry list to roots that occur in simplex words. At the initial stage of the project, we were looking for roots that could be assigned to a given word class (the word class of the simplex word where it occurred) and to a meaning. This distinction helps to capture the contrast between vernacular and neoclassical

¹¹ This non-funded project was hosted by CLUL (Centro de Linguística da Universidade de Lisboa). It was developed between 2011 and 2015. During this period, we organised a conference (*Planning non-existent dictionaries*) that took place at Faculdade de Letras da Universidade de Lisboa in 2013. A selection of papers from this conference was published in 2015 (cf. Silvestre & Villalva 2015).

lexica in Portuguese, but it also has the advantage of being able to undergo a strictly synchronic assessment:

- the noun root *vid* – is an entry because it occurs in the simplex noun *vida* ‘life’;
- the root *vit* – is not an entry because it does not occur in simplex words – it occurs in derivatives, such as *vital* ‘vital’, or in compounds, such as *vitamina* ‘vitamin’.

Another consequence of the root constraint is that roots that occur in more than one simplex word originate as many entries. Consider the case of the root *sec-*. It occurs in the adjective *seco/a* ‘dry’; in the noun *seca* ‘drought’; in the noun *seco*, the plural form of which (e.g. *secos*) can be found with the meaning ‘dry provisions’ in the phrase *armazém de secos e molhados* ‘grocery’; and in the verb *secar* ‘to dry’. Though some of these words may be related by conversion, we decided to acknowledge their roots as independent dictionary entries.

Finally, the semantics of each root also requires a note. This dictionary prototype seeks to convey the necessary information, and only the necessary information. The adjective *seco* ‘dry’ that was mentioned above has a basic meaning which is related to the lack of water or moistness: *tempo seco* ‘dry weather’ is a weather condition in which there is no rain, *pele seca* ‘dry skin’ refers to a dehydrated skin – though the dryness of the weather and the dryness of the skin are inherently different, they both comply with the initial semantic definition. That is not the case in contexts such as *ruído seco* ‘clicking noise’ or *resposta seca* ‘cold reply’ – in these cases, since the meaning of the adjective cannot be ascertained by itself, it will not be considered. We should, however, link these entries to the collocations where they occur, and vice-versa.

WHY HISTORICAL AND MORPHOSEMANTIC?

The main goal of this prototype is to design a model for the recollection of lexicological information that may be used for the production of new dictionaries of all kinds, namely synchronic general dictionaries. Historical information will probably be irrelevant for most of these offspring projects, but it is crucial to

obtain a consistent and documented semantic account, including the unveiling of likely or unlikely semantic changes.

Historical information will be collected in heritage dictionaries and historical *corpora*. The availability of such sources is a language-specific feature. Some languages have a wide range of early dictionaries and textual *corpora*, while others lack records for most of their history. Within the Roots project, the common approach requires a selection of the most representative lexicographic sources, hopefully distributed along the time line. Not all heritage dictionaries are equally interesting – some of them are mere clones of previous ones, and, they should therefore be discarded. The selection should identify the dictionaries that represent a breakthrough for the lexicography of that language at the moment of their production. All others are irrelevant for the purposes of this project, and considering them would damage the economy of the dictionary. Historical *corpora* are equally important. Most Portuguese dictionaries do not convey semantic and usage information systematically. Sometimes, the most frequent meaning corresponds to the first meaning listed in a dictionary entry, but all the other combinations may also be found, as well as unprincipled presentation choices. The access to real usage that historical *corpora* make possible provides additional information on written usage along the time that may help to reveal semantic changes and meaning prevalence. Consider the case of the four Portuguese words that originate in the Latin noun *macula*:

- (2) Lat. *macula* ‘a spot, mark, stain’
- | | |
|---|---------------|
| } | <i>mágoa</i> |
| | <i>malha</i> |
| | <i>mancha</i> |
| | <i>mácula</i> |

[INFOPEDEIA] sets a synonymic link between *mancha* and *mácula*, both in the monolingual dictionary and in the Portuguese-English dictionary (i.e. ‘stain’, ‘spot’). However, current usage of both words is not synonymic: *mancha* is used to refer to a ‘(physical) stain’, whereas *mácula* refers to a ‘non-physical negative spot’. *Malha* is related to ‘knit’, and also to ‘spot’, if it relates to animal skin. *Mágoa* is firstly presented as a resultative of the verb *magoar*, and also as ‘bruise’ – the first part is a useless tautological definition and the second part is wrong. The actual meaning of *mágoa*, rightly identified in the second meaning, is ‘sorrow’:

malha ^a 'maʎɐ tecido mancha na pele dos animais	mancha 'mẽʃɐ 1. pequena extensão de cor diferente numa superfície, deixada por uma substância que suja; nódoa; mácula 2. pinta; malha 3. defeito; imperfeição 4. <i>figurado</i> desonra; deslustre 5. cama de javali 6. TIPOGRAFIA zona de uma página ocupada pela impressão de texto ou gravuras e limitada pelas margens: superior, inferior, direita e esquerda 7. <i>Brasil</i> doença do tabaco	mágoa 'magwɐ 1. efeito de magoar; nódoa ou marca produzida por contusão 2. tristeza; desgosto; amargura 3. dor de alma	mácula 'makulɐ 1. pequena extensão de cor diferente numa superfície, deixada por uma substância que suja; nódoa; mancha 2. <i>figurado</i> o que atinge a honra ou a reputação de alguém; desonra, infâmia 3. MEDICINA pequena área situada na parte central da retina, responsável pela perceção de detalhes 4. MEDICINA mancha cutânea plana que pode apresentar coloração acastanhada, rosada ou arroxeadada, surgindo em diversas situações (sarampo, rubéola, gravidez, etc.)
	1. (<i>nódoa</i>) stain uma mancha de gordura a grease stain spot 2. (na pele) spot; mark 3. <i>figurado</i> (<i>mácula</i>) spot; blemish sem manchas spotless	1. (<i>contusão</i>) bruise; sore 2. (<i>tristeza</i>) sorrow; grief; sadness	1. (<i>mancha</i>) stain; spot; blemish 2. <i>figurado</i> (<i>desonra</i>) infamy; stain

Table 1 – Latin *macula* descendants in Portuguese ([INFOPEDIA])

Early lexicographic sources reveal, as expected, that *mácula* has no registers before the 17th century. [Pereira B] documents the appropriation of the Latin word by translating it into the Latin *macula*, which is of little help in understanding its meaning¹², but he conveys a further Latin equivalent (i.e. *labes*), which, according to [Lewis & Short], is equally associated to ‘stain’ and to ‘blemish’. Less than a century later, [Bluteau] just acknowledges the metaphoric meaning: the word is used in the moral sense, he claims, which means that only the *labes* (i.e. ‘blemish’) meaning prevailed.

Mancha, *mágoa* and *malha* are older words in the Portuguese lexicography and it is unclear why these three plausible phonetic outputs coexist. All the phonetic changes documented by these words are attested elsewhere: (i) the deletion of

¹² According to [Lewis & Short], *macula* denoted “a spot, mark, stain”, “a mesh, hole (in network)”, “a spot, stain, blot, blemish, mole” and it also had a set of figurative meanings: “a blot, stain, stigma, blemish, fault, defect, disgrace”.

the post-tonic vowel [u] (cf. *auric[u]la* > *auricla* > *orelha* ‘ear’); (ii) the conversion of the consonant cluster [kl] into a palatal fricative [ʃ] (cf. *fasculu* > **fas[kl]u* > *fa[ʃ]o* ‘torch’) or into a palatal lateral [ʎ] (cf. *fornacula* > **forna[kl]a* > *forna[ʎ]a* ‘furnace’); (iii) the voicing of the intervocalic obstruent (cf. *acucula* > **a[k]ucla* > *a[g]ulha* ‘needle’); and (iv) even a similar nasal spreading (cf. [multus] > [‘mũ̃tu] ‘a lot of’). Usually, cognate words pair an old word and a neoclassical Latinism, not a neoclassical word and several old words, as it is the case here:

- (3) Lt. *macula* > Ptg. *mancha* [‘mẽʃɐ]
 Lt. *macula* > Ptg. *mágoa* [‘magwɐ]
 Lt. *macula* > Ptg. *malha* [‘maʎɐ]

This plethora of cognate words can be better understood if their first attestations are taken into account. In the Portuguese dictionaries, *mancha* and *mágoa* preceded *malha*. Until the mid 17th century, *mancha* is registered as an equivalent of the Latin *macula*, but no other semantic explanation is provided. [Bluteau] is less concise – the first meaning he provides is close to the meaning of the Latin etymon, and he offers a metaphorical meaning (i.e. ‘dishonour’), which is explained as a ‘character stain’. *Mágoa* has been registered since the 16th century and it is immediately associated to the figurative meaning that the etymon also had (i.e. ‘blemish’), then to ‘pain’, and afterwards to ‘sorrow’ (cf. [Pereira B]’s *animi dolor* and [Bluteau]’s *dor d’alma* ‘pain of the soul’). The third Latin meaning (i.e. ‘hole’) is inherited by *malha*, but this word is attested by [Cardoso] only in a collocation (i.e. *malha de ferro* ‘hook’); [Pereira B] provides four collocations that he translates into Latin words that help to elucidate their meaning – *malha de ferro* (*hamus* ‘hook’), *malha de rede* (*plaga* ‘hunting net’), *malha do animal* (*macula* ‘animal skin spot’) and *saia de malha* (*lorica* ‘leather cuirass’). [Bluteau] makes things simpler by bringing back the Latin ‘hole in a net’ meaning, together with ‘animal skin spot’.

	[CARDOSO]	[BARBOSA]	[PEREIRA]	[BLUTEAU]
mancha	macula	macula	macula	nodoa. Sinal que ficou de huma cousa, que sujou a superficie de outra deshonra, cousa que escurece a gloria, a fama, o nome
mágoa	labes nota	mancha labes macula dolor	dolor animi dolor	dor. Pesar. Sentimento. dor d'alma nodoa de sangue pisado
malha	Malha de ferro. hamus Macula. A malha.		malha de ferro. Hamus malha de rede. Plaga malha do animal. Macula saia de malha. Lorica	especie de anel em tecido de rede. mancha como as que se vem em cavalos, câes, & outros animaes de varias cores.
mácula			labes macula	mancha (Esta palavra he usada no sentido moral.)

Table 2 – *mancha*, *mágoa*, *malha* and *mácula* in early Portuguese dictionaries

So, apparently, Portuguese found a way to disambiguate the semantics of *macula*: *mancha* has the connotative meaning, while *mágoa* and *malha* adopted two different figurative meanings.

This survey of early dictionaries is quite interesting but it still does not allow us to understand the coexistence of the three different cognates. The diachronic distribution of the word usage that a historical *corpus* can provide is at least equally interesting. The following results (cf. Table 3) were obtained in the [CdP]:

	TOTAL	13 th c.	14 th c.	15 th c.	16 th c.	17 th c.	18 th c.	19 th c.	20 th c.
MANCHA	1203			5	37	56	27	279	789
MÁGOA	1183	1	3	33	179	41	50	606	270
MALHA	542	1	2	22	44	71	24	93	285
MÁCULA	91				1	0	0	49	41

Table 3 – *mancha*, *mágoa*, *malha* and *mácula* in [CdP]

In Table 3, we can see that *mágoa* and *malha* are the oldest words, followed by *mancha* and finally by *mácula*. Morphologically related words may help us to find earlier attestations. In the case of *mancha*, neither the verb *manchar* ‘to stain’, nor the adjective *manchado* ‘stained’ confirm it, but the verb *magoar* ‘to hurt’ has indeed very early registers. *Malha* has a participial adjective (i.e. *malhado*) that also has early registers.

	TOTAL	13 th c.	14 th c.	15 th c.	16 th c.	17 th c.	18 th c.	19 th c.	20 th c.
MAGOAR	782	1	4	38	190	53	20	222	254
MALHADO	127	1	3	1	14	5	4	26	72

Table 4 – *magoar* and *malhado* in [CdP]

These figures, combined with the information conveyed by etymological dictionaries and a cross-linguistic analysis, allow us to build the hypothesis that *mágoa* is the Gallician-Portuguese output of the Latin *macula*; *malha* is a loan from the French output of *macula* (i.e. *maille*¹³); and *mancha* may be a loan of the Castilian output of *macula*, since it is registered in [Nebrija]’s dictionary and the *Corpus del Español* shows registers since the 13th century:

	TOTAL	13 th c.	14 th c.	15 th c.	16 th c.	17 th c.	18 th c.	19 th c.	20 th c.
MANCHA	2893	10	5	120	386	534	285	796	757

Table 5 – *mancha* in [CdP]

¹³ This is an excerpt of the etymological information offered by the [TLFi]:

1. Fin XI^e s. «taie (dans l’œil)» [...]; **2.** fin XII^e-début XIII^e s. «moucheture sur le plumage d’un oiseau» [...]; **3.** 1704 bot. (*Trév.*: se dit de l’œil d’où sort le fruit des melons et des concombres). **B. 1. a)** Fin XI^e s. «petit anneau en métal qui forme le tissu d’une armure» [...]; **b)** 1410 «anneau d’une chaîne» [...]; **2.** fin XII^es. «chacune des petites boucles de matière textile dont l’entrelacement forme un tissu lâche» [...]; **3.a)** 1216 «trou formé par chaque maille» [...]; **b)** 1690 «ouverture que l’on laisse dans un treillis de fer» (FUR.). Du lat. *macula*, proprement «tache» et par la suite «maille de filet». Le sens de «tache», rare dans l’anc. lang. (XII^e-XVI^es. ds *FEW* t.6, 1, p.12b), s’est exclusivement maintenu dans quelques emplois techniques et a été évincé par celui de «boucle de fil servant à faire un tissu» (cf. aussi, en parlant d’une cotte, l’a. prov. *malla*: ca 1060, *Chanson de Sainte Foy*, [...]).

The French origin is somehow corroborated by Corominas, who dates the Castilian *malla* from 1490 and claims that it comes from the French *maille*.

In sum, the coexistence of three old phonetic outputs receives a simple explanation, once we consider historical data, but word meanings are also worth considering on a diachronic level. *Mágoa* has presented the same basic meaning (i.e. sorrow, pain, blemish) since the 13th century (data from CdP):

- (4) 13th c. guardar os preçeytos de Deos ssë **magoa** (*Vidas de Santos de um manuscrito alcobacense*) ‘follow God’s commandments without **sorrow**’
- 14th c. tu ssayras linpo e ssem **magoa** de pecado (*Barlaam e Josephat*) ‘you will be clean and without **sorrow** of sin’
- 15th c. este bento Senhor nunca houve **mágoa** de pecado (*Demanda do Santo Graal*) ‘this holy man has never had **sorrow** of sin’
- 16th c. Ca lhes cõuem que cõ muy grande diligência vejam se tem algũa enfermidade ou **magoa** (*Marco Polo*) ‘it is convenient for them that they quickly see if they have any illness or **sorrow**’
- 17th c. esta palavra macula, que quando queremos por ella significar abertura de rede, mudamola em malha, & quando queremos significar labe, ou pecado, ou sentimento do animo, mudamola em **magoa**, & quando nodoa em mancha (*Origem da lingua portuguesa*) ‘this word macula, when we want it to mean a hole in a net we change it into malha, when we want to mean sin we change it into **magoa**, and when we want to mean stain, into mancha’
- 18th c. Melhor he vergonha no Rosto, que **magoa** no coração (*Adagios*) ‘better shame in the face than **sorrow** in the heart’

Malha brings two meanings from French (cf. [TLFi]: I. boucle, II. tâche), which still prevail. The first meaning (i.e. from hole, a net made of thread that leaves holes) is documented earlier – its contemporary meaning shifted to ‘knitwear’, but it may also be a synonym of ‘net’ and of ‘network’ (cf. 5a). The second meaning is far less frequent – in CdP, it is documented in the 15th and in the 16th centuries (cf. 5b):

- (5)a. 13th c. ûa **malha** da loriga (*Cantigas de Escárnio e Maldizer*) ‘a **hole** in the leather cuirass’
- 14th c. hûu cavalo coberto de **malha** (*Crónica Geral de Espanha de 1344*) ‘a horse covered by a **net**’
- 15th c. tem ãna cabeça hûa **malha** branca (*Orto do Esposo*) ‘a white net’
- 16th c. saias de **malha** (*Décadas da Asia (Década Primeira, Livros I-X)*) ‘**knitted** skirts’

- 17th c. quando a **malha** é muito estreita, só a água póde passar (Padre António Vieira, *Sermões*) ‘when the **net** is too thin, only water can get through’
- 18th c. Nem de cada **malha** peixe (*Adagios, proverbios, rifãos, e anexins da lingua portugueza*) ‘not a fish in every **net**’
- 19th c. a **malha** preciosa das amizades partidárias (Eça de Queiroz, *A Ilustre Casa de Ramires*) ‘the precious net of party friendships’
- 20th c. casaco de **malha** (*O Silêncio da Confissão*) ‘**knitted** jacket’
- b. 15th c. os touros eram orgulhosos [...] ûû ainda nem bem malhado nem bem sem **malha** (*A Demanda do Santo Graal*) ‘the bulls were proud [...] one of them looked like he neither had, neither he hadn’t **skin spots**’
- 16th c. alcatrazes pardaços com uma **malha** branca sobre o rabo (*Dois roteiros do século XVI*) ‘greyish frigate birds, with a white **skin spot** over the tail’

Mancha occurs in the 15th century as part of a toponym (i.e. *Mancha(s) de Aragão*). This usage can also be found afterwards, especially referring to Spanish toponyms, like *Castilla — La Mancha*. However, the predominant meaning is ‘stain’/‘spot’, either referring to the Red Sea or to human skin, and a metaphoric meaning (i.e. ‘dishonour’) can also be found:

- (6) 16th c. Mar Roxo [...] mui cheo de **manchas** vermelhas (*Décadas da Asia (Década Segunda, Livros I-X)*) ‘the Red Sea [...] very full of red **spots**’
- 17th c. nisto de tirar **manchas** era única: tirava as da cara mas nao as do corpo (*Vida de D. Gregório Gadanha*) ‘she was one of a kind in the field of **spot** removing: she removed them from the face but not from the body’
- 18th c. nao consentir **manchas** na honra (*Aventuras de Diófanos*) ‘do not consent **spots** in the honour’

Finally, *mácula* occurs once in the 16th century, in a theatrical text¹⁴, in an eulogy to the Virgin Mary – *mácula* means ‘sin’ here. It becomes a more frequent word from the 19th century onwards, and the meaning is always related to a ‘moral stain’:

¹⁴ Cf. Ó cedro nos campos estrela no mar / na serra ave fénis ùa só amada / ùa só sem **mácula** e só preservada / ùa só nacida sem conto e sem par. Available at: www.cet-e-quinientos.com/autores/free/211/m%C3%A1cula/False/True (February 2018).

- (7) 19th c. conhece a traição, a **mácula** no seu nome tão puro (Eça de Queiroz, *A Ilustre Casa de Ramires*) ‘he knows treason, a **stain** in his immaculate name’
- 20th c. Este «pecado» do jogo, esta queda, esta **mácula** indelével [...] é uma herança de família. (Urbano Tavares Rodrigues, *Os Insubmissos*) ‘this sin of the game, this fall, this inerasable **macula** [...] is a family heritage’

In sum, the information gathered in early dictionaries, historical *corpora*, etymological sources and cross-linguistic checking is thus crucial in reassessing contemporary dictionaries and in setting a solid basis for future projects. The first attempt to produce an actual dictionary entry regarded the adjectival root *brav* – ‘brave’), and it looked like this (from Silvestre & Villalva 2014):

root entry		BRAV- BRAVO/A Adjetivo variável em género G. βαρβαρος; L. BARBARU-; LV ibérico *barbru > *brabu <i>feroz</i> 1559; <i>valeroso</i> 1712-28; <i>irado</i> 1789 ~ bravamente <i>ferozmente</i> 1569; <i>com bravura</i> 1789 ~ bravozinho 1643-47 bravio <i>não cultivado</i> 1643-47; <i>não domesticado, não civilizado</i> 1712-28 bravinho 1569 bravíssimo 1789 bravoso = <i>bravo</i> 1789 DES. ~ bravosidade = <i>bravura</i> 1643-47 DES. bravaria = <i>bravata</i> 1899 DES. braveza <i>ferocidade</i> 1569; <i>fúria</i> 1712-28; <i>impetuosidade</i> 1789 bravura <i>ferocidade</i> 1569; <i>bravosidade</i> 1643-47; <i>coragem</i> 1899 bravejar <i>embravecer-se</i> 1643-47; = <i>esbravejar</i> 1712-28 DES. ou bravear = <i>esbravejar</i> 1899 DES. desbravar v. int. <i>amansar</i> 1789; <i>arrotear</i> 1899 ~ desbravamento 1899 embravear-se = <i>embravecer-se</i> 1789 DES. ~ embraveamento 1569 DES. embravecer <i>tomar bravo</i> 1569; <i>irritar</i> 1899 ~ embravecido 1643-47 ~ embravecimento 1643-47 DES. ~ desembravecer <i>amansar</i> 1569 DES. ~ desembravecido 1643-47 esbravecer <i>esbravejar</i> ; <i>embravecer</i> 1789 DES. ~ desbravecer = <i>dosembravecer</i> 1899 DES. esbravejar <i>estar furioso</i> 1643-47 <i>gritar</i> 1789 ou esbravear <i>gritar</i> 1789; = <i>esbravecer</i> 1899	Information on the simple word G Greek L Latin LV Vulgar Latin * hypothetical form > diachronic change ~ morphological relationship = semantic equivalence ou alternate form DES unused word in contemporary Portuguese	
simple word			base=root	Lexicographic sources (examples) 1569 CARDOSO, J., <i>Dictionarium latinolusitanicum</i> 1643-47 PEREIRA, B., <i>Prosodia in vocabularium bilingue, Latinum, et Lusitanum</i> 1712-28 BLUTEAU, R. <i>Vocabulário Portuguez e latino</i> 1789 SILVA, A. M. <i>Dicionário da Língua Portuguesa</i> 1899 FIGUEIREDO, C. de <i>Novo Dicionário da Língua Portuguesa</i>
complex words (base=simple word)				
complex adjectives				
complex nouns				
complex verbs				

Table 6 – Entry *brav-*

European Roots upgrade¹⁵

COST Action IS1305 – European Network of e-Lexicography (ENeL) – provided the exploratory project Roots an opportunity to discuss the Roots prototype with experts of different fields of lexicology and lexicography, and to reach a multilingual testing level. Intended as an upgrade of the previous project (i.e. Roots), the specific main goals of European Roots (ER) were to track the spread of cognate words and their semantic evolution across languages, on the one hand, and to locate semantic equivalents in different languages, on the other. A third important goal was the refinement of the prototype and the selection of a platform that could be shared by both researchers and user testers.

Initially, a small group of researchers, informally created in the second ENeL action meeting that took place in Bolzano, accepted to define a test entry list formed by twenty simplex and frequent adjective, nouns and verbs, in one specific semantic domain: emotion words. The choice of emotion words was decided to comply research interests of one of the team members who was developing an ontology of emotions. The languages involved were Dutch, French, German, Greek, Portuguese, Romanian. English provided the glosses. Each language would build its own lists, according to the initial guidelines (20 simple emotion adjectives, 20 simple emotion nouns and 20 simple emotion verbs).

The draft word lists (see Tables 7, 8 and 9) brought more problems than solutions. The first problem concerned the definition of ‘emotion words’, particularly in languages that set a distinction between ‘emotions’ and ‘feelings’. Since the selection of words was produced monolingually and the decision on what could fall under the category of ‘emotion words’ was taken individually, the total amount of English glosses is much higher than the initial total of twenty, which was not

¹⁵ This stage of the project was sponsored by ENeL. Under the auspices of this COST Action, we have organised another Conference at Faculdade de Letras da Universidade de Lisboa, in July 2015 (Colours and colour naming. Crosslinguistic approaches). A selection of papers from this conference was published in 2016 (cf. Silvestre & Villalva 2016). sites.google.com/a/campus.ul.pt/european-roots (December 2018).

systematically respected either. The gloss lists gathered 75 adjectives, 82 nouns, 78 verbs. Curiously, one single gloss (i.e. 'fear') is represented in all the sample lists.

The requirement of twenty simplex words for each word-class was tentatively stipulated, aiming to obtain an interesting cross-linguistic sample, but it was not scrupulously respected – individual word lists were not strictly formed by simplex words as they also included derivatives and complex lexicalised words in addition to some non-frequent words¹⁶. Finally, the major problem concerned the requirement of English glosses to inter-relate all the participating languages. In fact, the choice of an English equivalent for any given word may be less straightforward than expected. For instance, 'happy' is the gloss for three Portuguese adjectives (i.e. *alegre*, *contente*, *feliz*). Conversely, the Portuguese adjective *contente* may be paired with two English glosses: 'glad' and 'happy' and many other glosses could be chosen (cf. 'cheerful', 'joyful', etc.), either considering the basic meaning of each word or collocations¹⁷. English glosses should be as generic as possible – glosses are not translations, they are semantic indexes. But the choice of each gloss remains problematic.

This discussion had the merit of demonstrating that the choice of English as an interface required the inclusion of English as one of the languages, and a bilingual approach for each language with English. It also demonstrated the need to contextualise the targeted words – providing a sample sentence and its translation may be indispensable. A corollary of this discussion is related to the obvious historical/cultural connections that the prototype should be able to incorporate in the future.

Another issue concerned the obvious need to include phonetic transcriptions for each word. Though the number of languages that make use of the Latin alphabet is higher than the number of languages that do not, the fact is that the phonetic transcription is equally useful for all languages. The correlation between sounds and graphemes is language-specific.

¹⁶ The frequency measurement could not in fact be considered because many languages lack such data.

¹⁷ Cf. *merry Christmas* = *feliz Natal* (cf. **alegre/*contente Natal*)
happy New Year = *feliz/bom Ano Novo* (cf. **alegre/*contente Ano Novo*)
feliz coincidência = *fortunate coincidence* (cf. *?happy coincidence/*merry coincidence*)

The following tables display the results of this first task based on the alphabetic ordering of the English glosses. The number in each language column corresponds to the total number of words. Semantic equivalences are established by rows.

EMOTION ADJECTIVES						
Dutch (25)	French (18)	German (20)	Greek (20)	Portuguese (20)	Romanian (27)	English (75)
			θαυμαστός			admirable
<i>bang</i>						afraid
<i>kwaad</i> <i>boos</i>		<i>böse</i>				angry
<i>slecht</i>	<i>mauvais</i>	<i>schlecht</i>		<i>mau</i>	<i>rău</i>	bad
	<i>beau</i>	<i>schön</i>		<i>belo</i>	<i>frumos</i>	beautiful
			αγαπημένος αγαπητός			beloved
	<i>amer</i>			<i>amargo</i>		bitter
		<i>kühn</i>				bold
		<i>tapfer</i>				brave
<i>gerust</i>	<i>tranquille</i>		ήρεμος ψύχραιμος	<i>tranquilo</i>	<i>calm</i> <i>pașnic</i>	calm
					<i>atent</i>	careful
		<i>frech</i>				cheeky
<i>vrolijk</i>			χαρούμενος		<i>voios</i> <i>joyial</i>	cheerful
	<i>froid</i>	<i>kalt</i>		<i>frio</i>	<i>rece</i>	cold
	<i>fou</i>		τρελός αγαπητός	<i>doido</i> <i>louco</i>	<i>nebun</i>	crazy
						dear
	<i>profond</i>			<i>profundo</i>	<i>profund</i>	deep
<i>emotioneel</i>			συναισθηματικός			emotional
<i>enthousiast</i>						enthusiastic
<i>kwaad</i>	<i>mauvais</i>				<i>rău</i>	evil
			συγκλονιστικός συναρπαστικός			exciting
<i>fantastisch</i>						fantastic
			αγαπημένος			favourite
<i>vrij</i>	<i>libre</i>			<i>livre</i>	<i>liber</i>	free
<i>bang</i>						frightened
			τρομακτικός			frightening
					<i>nostim</i>	funny
		<i>sanft</i>			<i>blând</i>	gentle
				<i>contente</i>		glad
<i>goed</i>	<i>bon</i>	<i>gut</i>		<i>bom</i>	<i>bun</i>	good

EMOTION ADJECTIVES						
Dutch (25)	French (18)	German (20)	Greek (20)	Portuguese (20)	Romanian (27)	English (75)
<i>geweldig</i>		<i>toll</i>				<i>great</i>
<i>schuldig</i>						<i>guilty</i>
<i>blij</i> <i>gelukkig</i> <i>vrolijk</i>	<i>heureux</i> <i>joyeux</i>		<i>ευτυχής</i> <i>ευτυχισμένος</i> <i>χαρούμενος</i>	<i>alegre</i> <i>feliz</i> <i>contente</i>	<i>vesel</i> <i>ferice</i>	<i>happy</i>
	<i>chaud</i>			<i>quente</i>		<i>hot</i>
					<i>inert</i>	<i>inert</i>
		<i>innig</i>				<i>intimate</i>
					<i>gelos</i>	<i>jealous</i>
	<i>léger</i>			<i>leve</i>		<i>light</i>
<i>heerlijk</i>						<i>lovely</i>
	<i>fou</i>					<i>mad</i>
<i>vrolijk</i>			<i>χαρούμενος</i>			<i>merry</i>
		<i>zähm</i>				<i>mild, tame</i>
			<i>νευρικός</i>			<i>nervous</i>
<i>prettig</i>		<i>nett</i>				<i>nice</i>
		<i>sonderbar</i>				<i>odd</i>
			<i>οδυνηρός</i>			<i>painful</i>
					<i>paşnic</i>	<i>peaceful</i>
		<i>eigen</i>				<i>peculiar</i>
		<i>angenehm</i>				<i>pleasant</i>
			<i>ευχάριστος</i>			<i>pleasing</i>
	<i>profond</i>				<i>profund</i>	<i>profound</i>
<i>trots</i>		<i>stolz</i>	<i>υπερήφανος</i>			<i>proud</i>
<i>rustig</i>						<i>quiet</i>
	<i>triste</i>		<i>θλιβερός</i>	<i>triste</i>	<i>trist</i>	<i>sad</i>
<i>tevreden</i>						<i>satisfied</i>
	<i>tranquille</i>					<i>serene</i>
	<i>sérieux</i>			<i>sério</i>	<i>serios</i>	<i>serious</i>
					<i>timid</i>	<i>shy</i>
<i>flink</i>						<i>significant</i>
					<i>taciturn</i>	<i>silent</i>
						<i>strong</i>
<i>sterk</i>					<i>taciturn</i>	<i>sullen</i>
					<i>posac</i> <i>ursuz</i>	<i>sulky</i>
	<i>doux</i>	<i>süß</i>		<i>doce</i>	<i>dulce</i>	<i>sweet</i>
<i>lekker</i>						<i>tasty</i>
	<i>tendu</i>			<i>tenso</i>		<i>tense</i>
<i>moe</i>						<i>tired</i>
	<i>tranquille</i>					<i>tranquil</i>

EMOTION ADJECTIVES						
Dutch (25)	French (18)	German (20)	Greek (20)	Portuguese (20)	Romanian (27)	English (75)
	<i>laid</i>			<i>feio</i>		<i>ugly</i>
<i>onzeker</i>						<i>uncertain</i>
		<i>warm</i>			<i>cald</i>	<i>warm</i>
		<i>wild</i>				<i>wild</i>
			<i>θαυμαστός</i>			<i>wonderful</i>
			<i>ανήσυχος</i>			<i>worried</i>
			<i>ανησυχητικός</i>			<i>worrying</i>

Table 7 – Emotion adjectives

EMOTION NOUNS						
Dutch (25)	French (19)	German (20)	Greek (20)	Portuguese (20)	Romanian (28)	English (82)
<i>verbazing</i>						<i>amazement</i>
	<i>colère</i> <i>rage</i>	<i>Zorn</i>		<i>ira</i> <i>raiva</i>	<i>mânie</i>	<i>anger</i>
	<i>angoisse</i>			<i>angústia</i>		<i>anguish</i>
	<i>angoisse</i>		<i>άγχος</i>			<i>anxiety</i>
<i>schuld</i>						<i>blame</i>
	<i>calme</i>		<i>ψυχραιμία</i> <i>ηρεμία</i>	<i>calma</i>		<i>calmness</i>
		<i>Vorsicht</i>				<i>caution</i>
		<i>Sorge</i>				<i>concern</i>
		<i>Mut</i>				<i>courage</i>
<i>schuld</i>						<i>debt</i>
	<i>trahison</i>			<i>engano</i>		<i>deceit</i>
					<i>jind</i>	<i>desire</i>
	<i>désespoir</i>			<i>desespero</i>		<i>despair</i>
			<i>απογοήτευση</i>			<i>disappointment</i>
<i>emotie</i>	<i>émotion</i>		<i>συναίσθημα</i>	<i>emoção</i>	<i>emoție</i>	<i>emotion</i>
			<i>ενθουσιασμός</i>			<i>enthusiasm</i>
					<i>invidie</i> <i>jind</i>	<i>envy</i>
	<i>trahison</i>			<i>engano</i>		<i>error</i>
					<i>stimă</i>	<i>esteem</i>
			<i>συγκίνηση</i>			<i>excitement</i>
	<i>faute</i>			<i>culpa</i>	<i>vină</i>	<i>fault</i>
		<i>Gunst</i>				<i>favour</i>
<i>angst</i>	<i>peur</i>	<i>Furcht</i> <i>Angst</i>	<i>φόβος</i>	<i>medo</i>	<i>frică</i>	<i>fear</i>
<i>vriendschap</i>						<i>friendship</i>
<i>schrik</i>	<i>peur</i>			<i>susto</i>	<i>spaimă</i>	<i>fright</i>

EMOTION NOUNS						
Dutch (25)	French (19)	German (20)	Greek (20)	Portuguese (20)	Romanian (28)	English (82)
<i>frustratie</i>			<i>σύγχυση</i>			<i>frustration</i>
	<i>fureur</i>			<i>fúria</i>	<i>furie</i>	<i>fury</i>
		<i>Gier</i>				<i>greed</i>
		<i>Groll</i>				<i>grudge</i>
	<i>faute</i>			<i>culpa</i>	<i>vină</i>	<i>guilt</i>
<i>geluk</i>			<i>χαρά</i>			<i>happiness</i>
<i>haat</i>						<i>hate</i>
					<i>ură</i>	<i>hatred</i>
<i>warmte</i>						<i>heat</i>
<i>hoop</i>					<i>nădejde</i>	<i>hope</i>
	<i>horreur</i>			<i>horror</i>	<i>oroare</i>	<i>horror</i>
		<i>Demut</i>				<i>humbleness</i>
<i>honger</i>						<i>hunger</i>
			<i>αδιαφορία</i>			<i>indifference</i>
	<i>rage</i>			<i>ira</i>		<i>indignation</i>
		<i>Freude</i>				<i>joy</i>
	<i>nostalgie</i>			<i>saudade</i>	<i>alean dor</i>	<i>longing</i>
<i>liefde</i>	<i>amour</i>		<i>έρωτας</i> <i>αγάπη</i>	<i>amor</i>	<i>amor dragoste</i>	<i>love</i>
<i>geluk</i>						<i>luck</i>
		<i>Lust</i>				<i>lust</i>
					<i>melancolie</i>	<i>melancholy</i>
	<i>trahison</i>			<i>engano</i>		<i>mistake</i>
		<i>Laune</i>				<i>mood</i>
					<i>jale</i>	<i>mourning</i>
	<i>horreur</i> <i>nostalgie</i>			<i>saudade</i>	<i>dor</i> <i>nostalgie</i>	<i>nostalgia</i>
<i>pijn</i>	<i>douleur</i>	<i>Schmerz</i>		<i>dor</i>	<i>chin</i>	<i>pain</i>
<i>paniek</i>			<i>πανικός</i>			<i>panic</i>
	<i>passion</i>			<i>paixão</i>	<i>patimă</i> <i>pasiune</i>	<i>passion</i>
		<i>Geduld</i>				<i>patience</i>
	<i>calme</i>					<i>peace</i>
<i>hoop</i>						<i>pile</i>
<i>plezier</i>	<i>plaisir</i>			<i>prazer</i>		<i>pleasure</i>
		<i>Ohnmacht</i>				<i>powerlessness</i>
	<i>orgueil</i>			<i>orgulho</i>	<i>orgoliu</i>	<i>pride</i>
	<i>colère</i>			<i>raiva</i>		<i>rabies</i>
<i>woede</i>			<i>οργή</i>			<i>rage</i>
<i>rust</i>						<i>rest</i>

EMOTION NOUNS						
Dutch (25)	French (19)	German (20)	Greek (20)	Portuguese (20)	Romanian (28)	English (82)
verdriet						sadness
			ικανοποίηση			satisfaction
	peur			susto	groază spaimă	scare
	honte		ντροπή	vergonha	rușine	shame
	peur			susto	spaimă	shock
leed		Leid				sorrow
sterkte						strength
stress						stress
	surprise		έκπληξη	surpresa	surpriză	surprise
spanning						tension
			τρόμος			terror
		Dank				thanks
					fior	thrill
					chin	torment
					necaz	trouble
vertrouwen						trust
onzekerheid						uncertainty
			ανησυχία			worry
	fureur rage	Wut		ira fúria	furie	wrath
		Eifer				zeal

Table 8 – Emotion nouns

EMOTION VERBS						
Dutch (29)	French (20)	German (20)	Greek (22)	Portuguese (35)	Romanian (23)	English (82)
			θαυμάζω			to admire
					a năzui	to aim for
		verblüffen				to amaze
			διασκεδάζω	divertir		to amuse
ergeren (zich)				aborrecer		to annoy
schamen (zich)						to be ashamed
vervelen (zich)						to be bored
balen						to be fed up with
schrikken						to be frightened
verheugen (zich)			ευτυχώ χαίρω			to be happy
	jalouser					to be jealous
			λυπούμαι			to be sad
					a se sfi	to be shy
verdragen						to bear

EMOTION VERBS						
Dutch (29)	French (20)	German (20)	Greek (22)	Portuguese (35)	Romanian (23)	English (82)
verbijsteren						to bewilder
	accuser			culpar		to blame
koesteren						to cherish
instorten						to collapse
		loben		recomendar		to commend
		jammern		queixar		to complain
				interessar	a interesa	to concern
	pleurer	weinen		chorar	a plânge	to cry
	tromper			enganar	a înșela	to deceive
	mourir			morror		to die
			απογοητεύω			to disappoint
		scheuen				to dread
			τρελαίνω			to drive mad
doorstaan				aguentar		to endure
genieten	jouir			gozar		to enjoy
			συγκινώ	excitar		to excite
verwachten				esperar		to expect
vrezen			φοβούμαι	recear		to fear
	sentir	fühlen empfinden		sentir	a muri a simți	to feel
	oublier			esquecer	a uita	to forget
		ärgern				to fret
			τρομάζω			to frighten
frustreren				frustrar		to frustrate
opwinden (zich)						to get excited
opwinden (zich)						to get worked up
beleven						to go through
	grandir			crescer	a crește	to grow
haten	haïr			odiar	a urî	to hate
raken				bater		to hit
		hoffen		esperar	a năzui a spera	to hope
	blesser	verletzen		doer ferir	a răni	to hurt
				incitar	a ațâța	to incite
		beleidigen		insultar		to insult
	intéresser			interessar	a interesa	to interest
irriteren	énerver	reizen		irritar	a irita	to irritate
missen				faltar		to lack
	rire	lachen		rir	a râde	to laugh
	plaire	mögen gefallen	αρέσω	gostar	a plăcea	to like
verlangen						to long
	perdre			perder	a pierde	to lose
	aimer		αγαπάω	amar	a iubi	to love
missen						to miss

EMOTION VERBS						
Dutch (29)	French (20)	German (20)	Greek (22)	Portuguese (35)	Romanian (23)	English (82)
<i>ontroeren</i>						<i>to move</i>
				<i>culpar</i>		<i>to place guilt</i>
			αρέσω ευχαριστώ	<i>agradar</i>		<i>to please</i>
		<i>freuen</i>				<i>to rejoice</i>
	<i>rappeler (se)</i>			<i>lembrar</i>	<i>a aminti</i>	<i>to remember</i>
						<i>to remind</i>
					<i>a mâhni</i>	<i>to sadden</i>
			ικανοποιώ			<i>to satisfy</i>
		<i>schreien</i>		<i>gritar</i>		<i>to scream</i>
		<i>erweichen</i>				<i>to soften</i>
		<i>erstarren</i>				<i>to stiffen</i>
<i>lijden</i>	<i>souffrir</i>		υποφέρω πονάω	<i>sofrer</i>	<i>a suferi</i>	<i>to suffer</i>
<i>verwonderen verbazen</i>	<i>surprendre</i>		εκπλήσσω	<i>espantar</i>	<i>a uimi</i>	<i>to surprise</i>
	<i>jouir</i>					<i>to take pleasure</i>
			ευχαριστώ			<i>to thank</i>
<i>raken</i>						<i>to touch</i>
	<i>tromper</i>			<i>enganan</i>	<i>a înșela</i>	<i>to trick</i>
		<i>wollen</i>				<i>to want</i>
<i>wensen</i>						<i>to wish</i>
<i>verontrusten</i>			ανησυχώ ταράζω			<i>to worry</i>
			λατρεύω			<i>to worship</i>

Table 9 – Emotion verbs

At this stage, we felt the need to review the prototype and set new guidelines. Language independent guidelines were set as follows:

- the ER prototype aims to understand and describe all mono-morphemic roots that occur in simplex words (considering their morphological structure);
- each root corresponds to an entry that includes all the different meanings of each simplex word headed by that root;
- each meaning of each word will be documented. These quotations will be the input for a multilingual component that will allow to address cognitive and cultural issues;
- complex words morphologically related to a root will be presented in a word family;

- derivatives and compounds will be included if and only if they help to characterise the other words, or if their time span is somehow relevant for the understanding of the general picture;
- each root will receive a brief etymological explanation that should identify the immediate etymon, and go as far back as possible, in order to identify cognates in different languages and the spreading of each etymon in the European dominion.

The revision of the language-specific guidelines led to the following formulation:

- all the words in each root word family must be looked up in a set of monolingual lexicographic sources and *corpora* that cover contemporary usage and past synchronies;
- the list of lexicographic sources is critically set by each group of language experts that participate in this project;
- the entry list is formed by the roots of simplex words that can be found in a contemporary dictionary elected as the reference dictionary;
- each entry is headed by the identification of the root, the language it belongs to, and by some brief etymological information¹⁸;
- the description of each root will be presented in three tables:

Table 1 (sources) displays the lexicographic assessment of all the words that contain a given root, and are registered in the selected contemporary reference dictionary. These words are registered orthographically (including orthographic alternates, whenever necessary). An IPA transcription must also be provided. The list is presented in alphabetic order.

All the words are then checked:

- in the dictionaries that have been critically selected – to understand their meanings and the putative existence of any semantic shifts;
- in diachronic *corpora* – to determine the life span of each word;

¹⁸ We will provide brief etymological information that identifies the immediate etymon and goes as far back as possible. Apart from the etymological sources available for each languages, we use [Pokorny] as authority for Indo-European.

- in contemporary corpora – to confirm that they are still in usage.

Table 2 (evidence) lists all the words that contain the target root, provided that they are relevant for the description of that root. This list is also presented in alphabetic order and it includes two quotations per word:

- the first quotation illustrates the *terminus a quo* of the word¹⁹. It must be selected from a diachronic *corpus*, if possible, or from other sources, such as etymological dictionaries or other more specific *corpora*;
- the second register illustrates the *terminus ad quem* of the word – it must be retrieved from a contemporary *corpus*.

Table 3 (word family) contains a summary of the information gathered above. The words are displayed according to their semantics and their morphological relationships. Different meanings of any given word will be registered independently (in the example below²⁰, *raiva* ‘disease’ and *raiva* ‘emotion’ are two different subentries).

This table conveys the following information:

- the first column lists all the simple words that contain the root;
- the second column lists all the derivatives that are obtained directly from the root;
- the third column contains derivatives from previously derived words (and eventually further derivatives);
- the fourth column contains words that are derived from the simple words (not directly from the root);
- the fifth column presents an English gloss;
- the sixth column registers the century of the first attestation (i.e. *terminus a quo*);

¹⁹ The very first register may not be the most representative – it is better to choose the very best early record than a less clear absolute first attestation. It should be noted that first attestations are systematically under revision, since historical *corpora* are still far from comprising an extensive coverage of old written documents, and oral language is impossible to retrieve.

²⁰ Cf. Table 18.

- the seventh column may indicate a century for words that became rare or unused or it may be filled with C (for contemporary) if the word is still in use;
- the eighth and last column refers to the usage of each word. It may be left blank if the words are still used; or it may be filled with one of two labels (rare or unused) to differentiate words that have low frequency values from non-attested words in contemporary sources. Further usage labels may also be registered here. For instance, Portuguese has two standard usages – Brazilian and Portuguese. Hence, EP will be used for the European usage and BP will mark a Brazilian usage. No label stands for a common usage in both Portuguese standards.

The purpose of Table 1 and Table 2 is gathering the relevant information to build Table 3, which is analytical, rather than merely documental.

Two roots were elected for testing these guidelines (namely, the equivalents for ‘anger’ and ‘red’) in three languages: German, Modern Greek²¹ and Portuguese. This stage of the prototype is documented in Blanck, Cardeira, Tsolakidis, Villalva (2016). The following tables display the output of this prototype test. They present the German²², Modern Greek²³ and Portuguese²⁴ equivalents of ‘anger’ (i.e. *Wut*, *thi'mos* and *raiva*).

²¹ In the current stage of development of the ER project, we basically deal only with Modern Greek, the language currently prevailing in the Republic of Greece. Modern Greek goes back to Ancient Greek, but it is a different linguistic system. Similarly, Portuguese, although it goes back to Latin, has a linguistic system that differs from that of Latin. Thus, in this chapter we will refer to Ancient Greek (as well as to Hellenistic and Medieval Greek, that is to stages of development of Greek between Ancient and Modern Greek) only when this is necessary for providing clarifications or some details useful for the understanding of the historical development of the Modern Greek words under examination.

²² The German tables were prepared by Wiebke Blanck.

²³ The Greek tables were prepared by Simeon Tsolakidis.

²⁴ The Portuguese tables were prepared by Alina Villalva and Esperança Cardeira.

These tables allow us to conclude that these three words are etymologically unrelated. Chronologically, the German word *Wut* (8th-9th century) is much older than the Portuguese *raiva* (14th century) and the Modern Greek *θi'mos* (15th century). We may also observe that the German *Wut* has undergone no significant semantic changes throughout its existence, though the OHG etymon *wuot* had a different meaning (i.e. 'mad'). Further research will demonstrate that *Wut's* most remote PIE etymon (i.e. **wet* – 'to blow; inspire, spiritually arouse') is the origin of the Latin noun *vates* that meant 'a foreteller, seer, soothsayer, prophet, diviner'. In Portuguese, *vate* is quite a recent Latinism meaning 'poet'. Apparently, the Greek noun *θi'mos* is semantically more unstable: the remote PIE etymon **dheu-/dhu-*, associated to the meanings 'smoke, to reel, dissipate, blow', originated the Ancient Greek *t^hū'mos*, which originally meant 'soul, spirit', and the Modern Greek path begins with 'anger' in the 15th century and 'anger of the elements' in the 16th century. Some other meanings (i.e. 'spirit, passion', 'poison' and 'desire') are recorded in the 16th and the 17th centuries, but they are no longer used – hence, the polysemy of the word is no longer active²⁵. Further research will show that *θi'mos's* PIE etymon **dheu* – is also represented in the Romance languages branch (cf. Lat. *fumus* 'smoke, steam, fume'), and hence in Portuguese (cf. *fumo* 'smoke'), but the semantic distance of the cognate words is again enormous. Finally, the Portuguese noun *raiva* descends from the PIE **rebh* – 'violent, impetuous' through the Latin *rabies* 'disease, anger'. The Portuguese word inherited and still maintains the polysemy of the Latin word. This very brief analysis illustrates the advantages of the gathering of a large quantity of information under a very synthetic presentation and the benefit of using the same methodological tools to describe different languages.

²⁵ The Ancient Greek *t^hū'mos* is attested with the meaning 'anger, wrath' already in 8th c. BC. *θi'mos* with the meaning 'anger' is attested in Medieval Greek of 13th c. AC.

GERMAN TABLES

Language: German												
W. Blanck												
Root: <i>Wūt-</i>												
Etymon: OHG <i>wuot</i> (ca. 9 th century) ‘mad, madness’ > PIE <i>*wāt-</i> or <i>*wōt-</i> ‘spiritually excited / geistig angeregt sein’,												
TABLE 1	IPA	[Stieler] 17 th c.	[Steimbach] 18 th c.	[Frisch] 18 th c.	[Adelung] 18 th c.	[¹ DWB] 19 th c.	[Sanders] 19 th c.	[Heyne] 19 th c.	[Paul] 20 th c.	[Trübner] 20 th c.	[WDG] 20 th c.	[Duden] 21 st c.
<i>Wūt</i> _{Nf}	[ˈvu:t]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Wutanfall</i> _{Nm}	[ˈvu:tʰanfal]	-	-	-	-	✓	-	-	-	✓	✓	✓
<i>Wutausbruch</i> _{Nm}	[ˈvu:tʰaʊsbʁʊx]	-	-	-	-	✓	-	-	-	✓	✓	✓
<i>wutbehend</i> _{ADJ}	[ˈvu:t be:bent]	-	-	-	-	✓	-	-	-	-	✓	✓
<i>Wutbürger</i> _{Nm}	[ˈvu:t ˈbyʁgɐ]	-	-	-	-	-	-	-	-	-	-	✓
<i>wüten</i> _v	[ˈvy:tʰ]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>wütend</i> _{ADJ}	[ˈvy:tʰnt]	✓	✓	-	-	(✓)	✓	-	✓	✓	✓	✓
<i>wutentbrannt</i> _{ADJ}	[ˈvu:t ent brant]	-	-	-	-	✓	-	-	-	✓	✓	✓
<i>Wüterei</i> _{Nf}	[vyːtəˈraɪ]	-	-	-	✓	✓	✓	-	-	-	✓	✓
<i>Wüterich</i> _{Nm}	[ˈvy:təʁɪç]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>Wutgeheil</i> _{Nm}	[ˈvu:t gəˈhoɪ]	-	-	-	-	✓	-	-	-	✓	✓	✓
<i>wütig</i> _{ADJ}	[ˈvy:tɪç]	-	-	✓	✓	✓	-	✓	-	✓	-	✓
<i>wutischäumend</i> _{ADJ}	[ˈvu:t çɔimənt]	-	-	-	-	(✓)	-	-	-	-	-	✓
<i>wutischraubend</i> _{ADJ}	[ˈvu:t ʃnaʊbnt]	-	-	-	-	✓	-	-	-	✓	✓	✓
<i>wutverzerrt</i> _{ADJ}	[ˈvu:t fɛʁˈtsɛʁt]	-	-	-	-	✓	-	-	-	-	✓	✓

TABLE 2 EVIDENCE:	TERMINUS AD QUO	TERMINUS AD QUEM
<i>Wut</i> _{Nf}	"In amentia In uoiti" (8 th /9 th cent.; Steinmeier/Sievers, Glossen zu biblischen Schriften)	"Polizei-Video löst Wut und Proteste in Chicago aus" (Weser-Kurier, 26.11.2015)
<i>Wutanfall</i> _{Nm}	"Der Schiffe Wutanfall , womit sie sich begrüßen / Ist jetzt so fürchterlich, als schwämmen auf dem Meer / Entwurzelte Cycladen frey umher.." (Deutsche Monatsschrift, Band 1790, Ausgabe 1)	"Er lästert über Fahrer, beleidigt Journalisten und hat Wutanfälle . In all den Jahren des Wandels in der Formel 1 ist Ron Dennis immer ganz der Alte geblieben." (Frankfurter Allgemeine Zeitung, 27.11.2015)
<i>Wutausbruch</i> _{Nm}	"Ich erzählte ihm nun von meiner Niedergeschlagenheit und dem Wutausbruch an dem Abend, wo ich auf seinen Wagen fiel [...]" (Adrien-Jean-Baptiste-François Bougogne, <i>Kriegererlebnisse</i> , 1812)	"Rudi Völlers Wutausbrüche sind legendär. Bayer Leverkusen's Manager kann sich nur schwer zügelh." (Welt Online, 27.11.2015)
<i>wutbehend</i> _{Adj}	"heftiges Zittern durchzuckt dann die Erde, den Himmel entlang rollt dräuend Gedröhn, wutbehend erhebt sich der Sturm und Erregung geht durch die Luft [...]" (Titus Lucretius Carus, <i>Das Weltall: ein Lehrgedicht in sechs Gesängen</i> , 1881)	"Als der türkische Premierminister Recep Tayyip Erdogan zu Beginn der Woche wutbehend ein Einreiseverbot gegen Cem Özdemir verhängte, mag das für manche Zeitgenossen wie ein Streit unter Landsleuten ausgesehen haben." (Berliner Morgenpost, 01.06.2014)
<i>Wutbürger</i> _{Nm}	"Anderer liegt der Fall bei den Bürgern in Wut. Sie waren denkbar knapp an der Fünfprozenthürde gescheitert: Sie erreichten 4,998 Prozent. [...] Erst nach einem Beschluss des Verwaltungsgerichts Anfang Juli durften sie die Unterlagen einsehen. Aus denen zogen sie Material für die gestrige Beweisaufnahme. Die ist nötig, denn im Fall der Wutbürger muss das Gericht Fehler beim Wahlablauf feststellen." (taz, die tageszeitung, 20.11.2007)	"Herr Schmickler, den Wutbürger gibt es seit den Demos gegen Stuttgart 21 - was halten Sie von dieser Wortschöpfung?" (Kölner Stadt-Anzeiger, 28.11.2015)
<i>wütten</i> _v	"Aber was hilft sie yn: wütten vn toben: hör was da folget." Martin Luther, <i>Der sechundreyssigst psalm David, eynen Christlichen Menschen zu leren ein trösten, wider die Mütterey der bößhem unnd freveln Gleyßner</i> , 1521)	"Das Gebiet war für die Rettungsdienste nicht zugänglich. Den Vorhersagen zufolge dürfte der Sturm bis zu drei Tage lang wütten ." (Spiegel Online, 18.10.2015)
<i>wütend</i> _{Adj}	"Vnd vollfuren die in glückselig ende da rin/ das der wütend vnd ylent nit mit stryten bringen mag." (Bildpat, [Buch der Weißheit der alten Weisen], 1483.)	"Die Forscher wollten wissen, ob Hunde einen wütenden Gesichtsausdruck von einem glücklichen unterscheiden können." (Berliner Morgenpost Online, 12.02.2015)
<i>wutentbrannt</i> _{Adj}	"Die Flamme muß das Wasser ewig hassen./ Und niemals können liebend sie sich lassen./ Drum sieht man immer wutentbrannt sie ringen!" (C.E. Rainold (ed.), <i>Hyllos, vermischte Aufsätze, belehrenden und unterhaltenden Inhalts</i> , 1820.)	"Gastells bekannteste Sprechrolle war aber wohl die des Homer aus der launischen Familienvater und ließ ihn jammern, wutentbrannt herumbrüllen, jubeln und mit zusammengekniffenen Augen 'Nein!' stöhnen." (Stuttgarter Nachrichten, 30.11.2015)
<i>Wüterei</i> _{Nf}	"zu lest lagt er auch handt an die weiber/ noch nit genugsam mit der man blut gesettigt. Un das ist die größte wüterei / da er nu so gar außgemetzelt/ ließ er for sich bringen die abgehawen haupter/." (Valerius, <i>Chronica von den Sprüchen und Thaten der Römer, Perser, Medier, Griechen</i> 1520)	"Aber irgendwann hatte Carrière seine Wut auf die katholische Kirche nicht mehr im Griff, so dass ihm Maischberger bei seinen Wortmeldungen lieber gleich das Wort abschmitt. Etwa, als er [...] dozierte, durch die Bibel werde auch Völkermord und Inzest gedeckt - vor lauter Wüterei kam Carrière nicht mehr auf den Punkt." (Berliner

<i>Wüterich</i> _{Nm}	"Damit wir aber nicht zu weit von vnserer angefangener Procession abschreiten: ist zu verstehen, daß wir von der heiligen Stett da Christus geboren vnn der Krippen gegangen sind in die Capell der vnschuldige Kindern, welche d. Wüterich Herodes vermeynd den Herrn Christum darunter zu erwischen, hat vmbbringen lassen." (Nicolaus Christophorus Radzivil, Johann Schwallart, Saloon Schweyegern, <i>Reyßbuch deß Heiligen Lands ...</i> Ander Theil, 1609)	Morgenpost Online, 21.09.2011)
<i>Wütgeheil</i> _{Nn}	"Ha! die zu Roß und die zu Fuß! Hinstur! Verzwweiflung! Wütgeheil! Hal! Todesschaur ergreift sie!" (Musen-Almanach, 1777)	"Rechtspopulisten, die sich in Sekten zusammenfinden und wieder auseinanderlaufen, die sich spalten und neue Bünde gründen, sind nicht das Volk . [...] Die Abwesenheit jeder konstruktiven Idee ist ersetzt durch stumpfes Bramarbasieren und Wütgeheil ." (taz, die tageszeitung, 02.11.2015)
<i>wütig</i> _{ADJ}	"Do ward d richter zornig vnd wütig alls an leo" (<i>Das Passional oder der hayligen leben das winter tail was die lieben hayligen vnd diener gottes vmb den name Jesu christi vnd christenlichen glauben gelitten habendt</i> . 1518)	" Wer Reformersches im Sinne des Aufklärerischen durchsetzen möchte, muss mit Gegenwind rechnen wie etwa in <i>[sic]</i> Baden-Württemberg der <i>[sic]</i> jener Petitionsmenschen, die gegen eine gewogene Verhandlung von Lehrstoff zu Sexuellem, vor allem Nichtheterosexuellem wütig protestierten." (taz, die tageszeitung, 11.04.2014)
<i>wutschäumend</i> _{ADJ}	"Der Erbprinz sagt Wutschäumend : "In Deutschland werde ich Satisfaktion fordern!" und eilte den Mädchen nach."(A. Weissem, <i>Serena: Mittheilungen aus dem Reiche des Komus zur Aufheiterung nach ernstest Geschichten</i> , 1824)	"Aufuhr um ein Trinkgefaß - Die schlichten Weihnachtsbecher von Starbucks verärgern Christen in den USA [...] Es gibt aber auch andere Stimmen, die sich fragen, wie viel von Jesus eigentlich in einem wutschäumenden Kunden steckt, der mit einer Handfeuerwaffe am Halfter in eine Starbucks-Filiale spaziert." (Welt kompakt, 11.11.2015)
<i>wutschnraubend</i> _{ADJ}	"Er geht nochmals aus seinem Zelte, und verweilt sich da bei irgend einem unsichtbaren Wesen, stets wutschnraubend gegen die Atriden, und gegen Ithakas König." (Sophokles Bestrafter Ajas. Aus dem Griechen neu übersetzt mit Anmerkungen von August Christian Borheck, 1781)	"Fernsehkameras fingen wutschnraubende Erwachsene und weinende Kinder in Knicks-Trikots im Publikumsbereich der Veranstaltung ein." (taz, die tageszeitung, 25.11.2015)
<i>wuwerzerrt</i> _{ADJ}	"Bernhards Wesen war in höchster Erregung, die Ruhe Erichs und der genossene Wein machten sein Blut noch tobender. Mit wuwerzerrten Mienen stand er da [...]" (Otto Roquette, <i>Orion: ein Phantasiestück</i> , 1851)	"Der geschädigte Polizeibeamte und ein Kollege wollen aus den Augenwinkeln heraus gesehen haben, wie Jan Hänzschel mit erhobenem rechten Arm auf den Polizeibeamten zugerannt sei. "Er hatte ein wuwerzerrtes Gesicht", erklärt der Geschädigte." (Sächsische Zeitung Regionalausgaben, 26.11.2015)

TABLE 3: WORD FAMILY	simple words	derivatives	compounds	English gloss	terminus a quo	terminus ad quem	usage label	
I.	<i>Wüt</i> _{Nf}			'anger'	8 th /9 th c.	C		
			<i>Wütanfall</i> _{Nm}	'tantrum'	1790	C		
			<i>Wütansbruch</i> _{Nm}	'outburst of rage, tantrum'	1812	C		
			<i>wütbebend</i> _{ADJ}	'trembling with anger'	1881	C	rare	
			<i>Wütbürger</i> _{Nm}	'citizen who has taken to demonstrating a lot and protesting vigorously due to anger about political decisions'	2007	C		
		<i>wütten</i> _v			'to rage, to rampage'	1521	C	
		<i>wütend</i> _{ADJ} (< <i>wütten</i> v)			'angry'	1483	C	
				<i>wütentbrannt</i> _{ADJ}	'furious'	1820	C	
			<i>Wüterei</i> _f (< <i>wütten</i>)		'raging'	1520	C	rare
			<i>Wütereich</i> _{Nm}		'tyrant'	1609	C	rare
				<i>Wütgeheil</i> _{Nm}	'bluster'	1777	C	
			<i>wütig</i> _{ADJ} (< <i>OHG wuot</i> 'wuotac' _{ADJ})		'furious'	1518	C	rare
				<i>wütschäumend</i> _{ADJ}	'being in a mad rage'	1824	C	rare
				<i>wütschnaubend</i> _{ADJ}	'snorting with rage'	1781	C	
			<i>wütverzerrt</i> _{ADJ}	'distorted with rage'	1851	C	rare	

Root: θημι-
Eymnon: Ancient Greek θημός 'soul, spirit' < PIE *dheu-/dhu- 'smoke, to reel, dissipate, blow'

Language: Modern Greek S. Tsolakidis											
TABLE 1	IP A	[Kriaras 1453-1669]	[Du Cange] 17 th c.	[Somavera] 18 th c.	[Dimitrakos] 20 th c.	[DSMG] 20 th c.	[Babiniotis] 21 st c.	[DCG] 21 st c.	[CGI] 21 st c.	[TC] 21 st c.	[HNC] 21 st c.
θημικό(ν) ^N	[θimi'ko(n)]	-	-	-	✓	✓	✓	✓	✓	✓	✓
θημάκος ^{ADI}	[θimi'kos]	-	-	-	-	✓	✓	✓	-	-	-
θημός ^N	[θi'mos] ¹	✓	-	✓	-	✓	✓	✓	✓	✓	✓
θημός ² ^N	[θi'mos] ²	✓	-	-	-	-	-	-	✓	-	✓
θημός ³ ^N	[θi'mos] ³	✓	-	-	-	-	-	-	-	-	-
θημός ⁴ ^N	[θi'mos] ⁴	✓	-	-	-	-	-	-	✓	-	-
θημός ⁵ ^N	[θi'mos] ⁵	✓	-	-	-	-	-	-	-	-	-
θημωστάρης ^N	[θimo'taris]	-	✓	-	-	-	-	-	-	-	-
θημώδης ¹ ^{ADI}	[θi'modis] ¹	✓	-	-	✓	-	✓	✓	✓	-	✓
θημώδης ² ^{ADI}	[θi'modis] ²	✓	-	-	-	-	-	-	-	-	-
θημώδης ³ ^{ADI}	[θi'modis] ³	✓	-	-	-	-	-	-	-	-	-
θημώμα ^N	[θimoma]	-	-	-	-	-	✓	✓	-	-	-
θημωμένα ^{ADV}	[θimo'mena]	✓	-	✓	-	✓	-	✓	✓	-	✓
θημωμένος ¹ ^{ADI}	[θimo'menos] ¹	✓	-	✓	✓	✓	-	-	✓	✓	✓
θημωμένος ² ^{ADI}	[θimo'menos] ²	✓	-	-	✓	✓	-	-	✓	-	-
θημωμένος ³ ^{ADI}	[θimo'menos] ³	-	-	-	✓	✓	-	-	✓	-	✓
θημώνωμα ^V	[θi'monome]	✓	-	-	-	-	-	-	-	-	-
θημώνω ¹ ^V	[θi'mono] ¹	✓	-	-	-	✓	✓	✓	✓	-	✓
θημώνω ² ^V	[θi'mono] ²	✓	-	✓	✓	✓	✓	✓	✓	✓	✓
θημώνω ³ ^V	[θi'mono] ³	-	-	-	✓	✓	✓	✓	✓	✓	-
θημωστάρια ^N	[θimota'ria]	✓	-	-	-	-	-	-	-	-	-
θημωτής ^N	[θimo'tis]	-	-	✓	-	-	-	-	-	-	-
θημώτρα ^N	[θi'motra]	-	-	✓	-	-	-	-	-	-	-
θημώτρια ^N	[θi'motria]	-	-	✓	-	-	-	-	-	-	-

TABLE 2 EVIDENCE:	TERMINUS AD QUO	TERMINUS AD QUEM
[θimi'ko(n)] _N	Το σύνολο των ψυχικών φαινομένων, τα οποία οφείλονται εις το συναισθηματικόν άμα και βουλήτικόν της ψυχής (Dimitrakos, ΘΥΜΙΚΟΣ2)	Όταν δεν είναι πρόσφωγας, τότε είναι πολύ εύκολο από τα παράθερα των ημερολόγιων να καλεί τους λαβωμένους στην ψυχή να πάρουν αποφάσεις για το μέλλον τους μόνο με τη λογική και όχι με το θυμικό (CGT, sek.edu.gr/search.php#doc3017)
[θimi'kos] _{ADJ}		Οι ψυχοσοματικές διαταραχές οφείλονται σε θυμικές αναστατώσεις ([Babiniotiis], ΘΥΜΙΚΟΣ1)
[θi'mos] _N	πέλεκφορος...αρεϊκώ θυμώ ξέοντας (Michael Ducas, <i>Historia Turko-byzantina</i> 227-25) (after 1453) ([Kriaras], ΘΥΜΟΣ1β)	Πολλές φορές, όμως, ο θυμός δεν εκφράζεται μόνο με λεκτικό ξέπασμα (CGT, sek.edu.gr/search.php#doc5475)
[θi'mos] _N	η θλίπασα, όταν θυμόν...πίανει (Antonios Acheles, <i>Le siege de Malte par les Turcs en 1565-625</i>) (1571) ([Kriaras], ΘΥΜΟΣ1δ)	Το πρώτο της αντέρεισμα αναδύεται στις ακτές της Καραϊβικής, στο σύμπλεγμα των Αντίλλων, κι απλώνεται ήσυχα, σιωπηρά, με τα πανύψηλα οροπέδια της, τα σκούρα μαβιά φαρφάρια της, ανάμεσα σε δύο φοβερά ρεύματα, μες στους θυμικούς και στους αγέρηδες των δύο ωκεανών (Κ. Tsivelekas, <i>On the flight of the kondor</i> , 1990) (HNC, hncentury1sp.gr/details.asp?vsent=1251591)
[θi'mos] _N	ως πότες δε θέλει ακούσει το θυμό την εγκύκλισην τον τόσο η κάμερα η βασιλική; (Zenon A' 21) (after 1631) ([Kriaras], ΘΥΜΟΣ3β)	
[θi'mos] _N	Αι δυνάμεις είναι τούτες: επιθυμίαν, θυμόν, το λογικόν, ήγουν τον λόγον, και το φλέγμα (Ioannikios Kartanos, <i>Ancien et Nouveau Testament</i> f. 33') (1536) ([Kriaras], ΘΥΜΟΣ3γ4)	
[θi'mos] _N	Θυμός των οριών (D.CENTURY Hesselring (ed.), <i>Les cinq livres de la Loi (le Pentateuque), traduction en néo-grec</i> XXXII 33) (1547) ([Kriaras], ΘΥΜΟΣ4)	
[θimo'ɽaris] _N	Αγριόθυμος, αγριόφυγος, θηριόδης, θυματάρης (Meursiu, ΘΥΜΟΤΙΑΡΗΣ)	
[θi'modis] _{ADJ}	Περί θυμόδης ιερέος, οπού να επιή από τον θυμόν του αγρήν ιερέα η λαϊκόν αφορίση η σφαλίση εκέλερσαν διά να επάρη δώρα (Ieromonachou, archimandritou & epitrou Iaoannimon Iakovou, <i>High Priests' Crosier</i> 155) (1645) ([Kriaras], ΘΥΜΩΔΗΣ1)	Σίγουρα το απαραίτητο είναι να μην τροφοδοτεί κάποιος το πάθος του άλλου. Δηλαδή, κάποιος δεν μπορεί να είναι θυμόδης από μόνος του (CGT, sek.edu.gr/search.php#doc12529)
[θi'modis] _{ADJ}	Βασιλέας...θυμόδης εις τον πόλεμο (<i>Chronicle of the Turkish sultans</i> 45') (before 1671) ([Kriaras], ΘΥΜΩΔΗΣ2)	
[θi'modis] _{ADJ}	τα κρηη των ζώων και των ψαριών και τον πουλιών είναι πλέον θυμόδες και πλέον χολοσταρχικά (Ioannikios Kartanos, <i>Ancien et Nouveau Testament</i> f. 18') (1536) ([Kriaras], ΘΥΜΩΔΗΣ3)	

TABLE 3: WORD FAMILY	simple words	root derivatives	embedded derivatives	word derivatives	English gloss	t. a. quo	t. ad quem	usage label
1.	[θiˈmos] ¹ N				'anger, wrath, rage'	15 th	C	
		[θiˈmono] ¹ V			'to make sb. angry or wroth'	16 th	C	
		[θiˈmono] ² V			'to get angry or wrathful'	17 th	C	unused
			[θimoˈtcaris] N		'brutal, wild of temper, cruel'	17 th		
				[θimoˈmena] ^{ADV}	'with anger, with wrath'	16 th	C	
				[θimoˈmenos] ^{ADJ}	'wrathful, angry, enraged, wild'	16 th	C	
				[θimoˈmenos] ² ADJ	'doughy, mettlesome'	16 th		unused
			[θimotaˈrja] N		'short-tempered'	16 th		unused
			[θimoˈtis] N		'irritable'	18 th		unused
			[θiˈmotra] N		'irritable'	18 th		unused
2.			[θiˈmotria] N		'irritable'	18 th		unused
		[θiˈmonome] V			'to disobey, to rise up'	16 th		rare (dial.)
		[θimoma] N			'getting angry, being angry'		C	rare
		[θiˈmoðis] ¹ ADJ			'irritable'	17 th	C	rare
		[θiˈmoðis] ² ADJ			'brash'	18 th		unused
		[θiˈmoðis] ³ ADJ			'who intensifies anger'	16 th		unused
					'the rage/anger of the elements of nature'	16 th	C	rare
		[θiˈmono] ² V			'to rage' (metaphorically for the elements of nature)		C	rare
				[θimoˈmenos] ³ ADJ	'enraged' (metaphorically for the elements of nature)	17 th	C	rare
		[θiˈmos] ¹ N			'desire'	17 th		unused
3.				'spirit, passion'	16 th		unused	
4.		[θimiˈko(n)] N			'spirit, passion'		C	
		[θimiˈkos] ADJ			'related to θυμικό'		C	rare
5.				'poison'				
	[θiˈmos] ¹ N					16 th		unused

PORTUGUESE TABLES

Root: *raib-*
Etymon: vulgar Latin *raib-*_{NR} < classical Latin *rabīēs* _N '1. disease, 2. anger' < PIE **rabh1rebh-* 'to rage, to be furious'
Language: Portuguese
A. Villalva & E. Cardeira

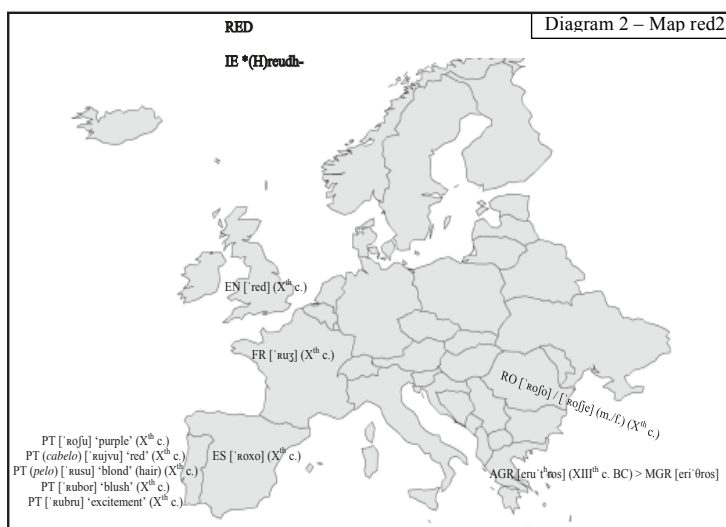
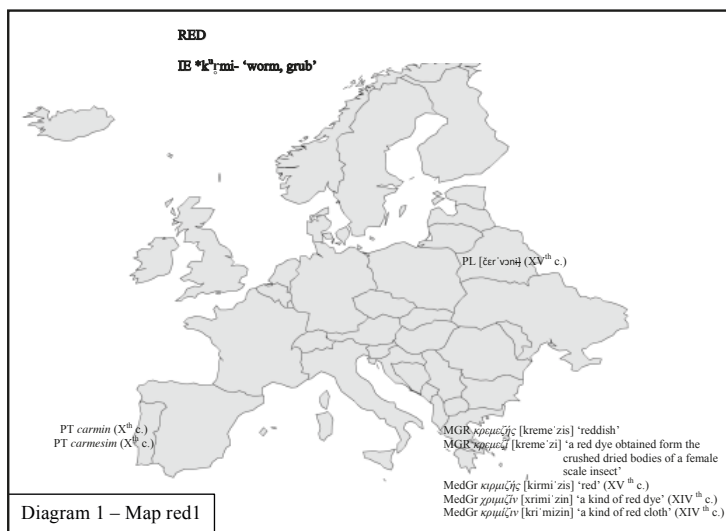
TABLE 1 SOURCES:	IPA	[Cardoso] 16 th c.	[Barbosa] 17 th c.	[Pereira A] [Pereira B] 17 th c.	[Bluteau] 18 th c.	[Folqman] 18 th c.	[Moraes ²] 19 th c.	[Figueiredo] 20 th c.	[INFOPEDIA] 21 st c.	CdP	CRPC
<i>antirraiva</i> ADJ	[ãtiˈrajve]	-	-	-	-	-	-	-	-	-	✓
<i>desenraivar</i> V	[dizəkajˈvar]	-	-	-	-	-	-	✓	✓	-	-
<i>desenraivecer</i> V	[dizəkajviˈser]	-	-	-	-	-	-	✓	✓	-	-
<i>enraivado</i> ADJ	[ẽrajˈvadu]	-	-	-	-	-	-	-	-	✓	✓
<i>enraivar</i> V	[ẽrajˈvar]	-	-	-	-	-	-	✓	✓	✓	-
<i>enraivecer</i> V	[ẽrajviˈser]	-	-	-	-	<i>enraivecer-se</i>	✓	✓	✓	✓	✓
<i>enraivecidamente</i> ADV	[ẽrajviˈsideˈmẽti]	-	-	-	-	-	-	-	-	-	✓
<i>enraivecido</i> ADJ	[ẽrajviˈsidu]	-	-	-	✓	-	✓	-	✓	✓	✓
<i>enraivecimento</i> N	[ẽrajvisiˈmẽtu]	-	-	-	-	-	-	-	✓	-	-
<i>raiva</i> N	[ˈrajve]	-	-	✓	✓	-	✓	✓	✓	✓	✓
<i>raiva</i> N	[ˈrajve]	-	-	✓	✓	✓	✓	✓	✓	-	✓
<i>raivado</i> PP	[rajˈvadu]	-	-	-	-	✓	-	-	-	✓	✓
<i>raivar</i> V	[rajˈvar]	-	-	✓	✓	-	✓	✓	✓	✓	✓
<i>raivazinha</i> N	[ˈrajveˈziɲe]	<i>raivesinha</i>	-	-	-	-	-	-	-	✓	✓
<i>raivecer</i> V	[rajviˈser]	-	-	-	-	-	-	✓	✓	-	-
<i>raivejar</i> V	[rajviˈʒar]	-	-	-	-	-	-	✓	✓	-	-
<i>raiveça</i> N	[rajˈvẽse]	-	-	-	-	-	-	✓	✓	-	-
<i>raivento</i> ADJ	[rajˈvẽtu]	-	-	-	-	-	-	✓	✓	-	✓
<i>raivinha</i> N	[rajˈviɲe]	-	-	-	-	-	-	-	✓	✓	✓
<i>raivosamente</i> ADV	[rajˈvoʒeˈmẽti]	-	-	-	-	✓	✓	✓	✓	-	-
<i>raivoso</i> ADJ	[rajˈvozu]	-	-	-	✓	-	✓	-	✓	✓	✓
<i>raivoso</i> ADJ	[rajˈvozu]	-	-	✓	✓	✓	✓	✓	✓	-	✓

TABLE 2 EVIDENCE:	TERMINUS AD QUO	TERMINUS AD QUEM
antirraiva ADJ	Imunização com vacina morta após a ocorrência da mordedura e imog/lobulina antirraiva (books.google.pt/books?id=4zY8DwAAQBAJ&pg=PT1248&dq=antirraiva&source=bl&ois=gQuHsH94T6&sig=htswBO87KbuqPBErAwDebaaKT3E&hl=pt-PT&sa=X&ved=0ahUKewjnhYSgrrZ4hXF1xQKHZK BKUQ64E1FDAM#v=onepage&q=antirraiva&f=false)	
desenraivar V	Anda cá, minha raivosa, desenraiva-te conmigo (archive.org/stream/RevistaLusitana10/Revista_Lusitana_10_djvu.txt, 1907)	---
desenraivecer V	desenraivecer /v. t./ Tornar sereno, abrandar, tirar a raiva a. ([Figueiredo], 1913)	desenraivecer / verbo transitivo/ ver desenraivar ([INFOPEdia], 2015)
enraivado ADJ	o Dr. Zé Loto, [...] advogado de causas religiosas, conservador em suma, enraivado e militante (Raul Pompéia, O Ateneu, 1888) - BP	o meu amigo anda enraivado de ciúme (CRPC, 1996)
enraivar V	O que me fez enraivar é o ver-te assim consumido por uma coisa destas (Júlio Dinis, Os Fidalgos da Casa Mourisca, 1871)	Você vai [...] se enraivar com ARES, o deus da guerra, que só faz besteira (www.skoob.com.br/pelos-poderes-dos-deuses-olimpianos-119773ed132880.html, 2010) - BP
enraivecer V	Demóstenes, [...] com os seus ralhos fazia enraivecer o rei da Macedónia (Cavaleiro de Oliveira, Cartas, 1756)	desastres do mundo que o comovem e envolvem e enraivecem (CRPC, 1998)
enraivecidamente ADV	por que se opõem enraivecidamente a um Serviço Nacional de Saúde geral e gratuito (CRPC, 1979)	
enraivecido ADJ	O sangue do bruto enraivecido misturava-se com o das suas vítimas (Alexandre Herculano, O Bobo, 1878)	Os anos de submissão conjugal transformaram -se num desespero enraivecido (CRPC, 1993)
enraivecimento N	Ela estava em fase de forte enraivecimento (books.google.pt/books?id=fBamBAAAQBAJ&pg, 2004)	
raivada N	nã o culpêdes ca cam cõ raivaya ã seu dono traua (Cronica Geral de Espanha, 1344)	o cientista francês descobriu a eficácia da vacina contra a raiva (CRPC, 1995)
raivada N	sas carnes os endiabradros / con gran raivya as começaram todas de roer (Cantigas de St. Maria, 13 th century)	nã o querem ver e têm raiva de quem sabe (CRPC, 1999)
raivado PP	eu fui-lhe dizer dessa rosa e do tanger e está raivada (Vicente, Velho da Horta, 1512)	Porque ela teria convosco, mas só em espírito, raivado (CRPC, 1944)
raivar V	hãa moller de Nevra que raivava [...] e apareceu lhe Santa Maria de noit'e guareceu a (Cantigas de St. Maria, 13 th);	Raivar desta maneira contra nada (CRPC, 1991)
raivazinha N	Rabiecula,ae,f,g,dim, Raivesinha ([Pereira A], 1697)	os vincos da testa revelavam antes uma raivazinha , fora de propósito (CRPC, 1986)
raivecer V	raivecer / v. i. / O mesmo que raivar. Cf. Filinto, VI, 203. ([Figueiredo], 1913)	Raivecer [...] / enraivecer-se (com), enraivecer-se (com) ([INFOPEdia], 2015)
raivejar V	o fogo [...] chia com mais força, estala, raiveja , grunhe (www.nilcenturiemcenturiusp.br/nile/literatura/anavega.odacasa.htm, 1963) - BP	-----

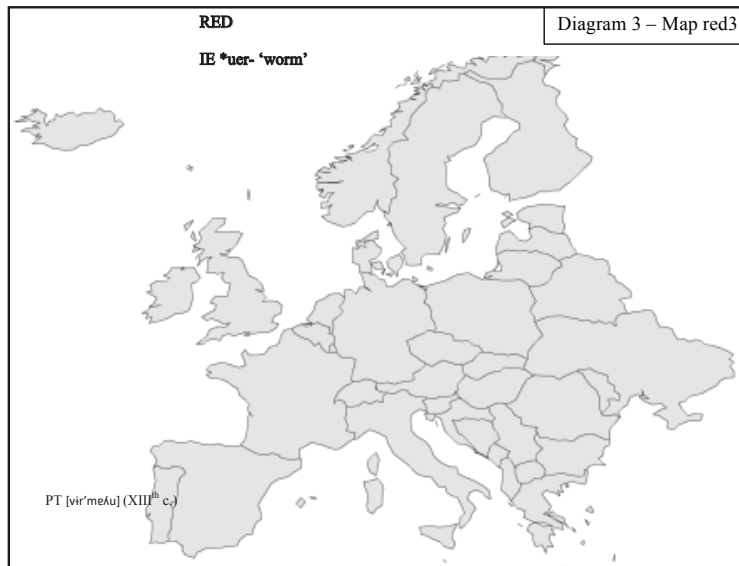
<i>raivença</i> N	<i>insultos</i> (memoria.bn.br/DocReader/Hotpage/HotpageBN.aspx?bib=305766&pagfis=476&pesq=&url=http://memoria.bn.br/docreader#, 1915) - BP	<i>de</i> raivença	----
<i>raivento</i> ADJ	<i>referidos pela menina com raivento energia</i> (CRPC, 1866)		----
<i>raivinha</i> N	<i>Que dolorosas raivinhas sentirá uma criatura [...] ao verificar que pôs um selo num sobrescrito no lugar designado pela moda antiga</i> (Júlia Lopes de Almeida, Livro das Donas e Donzelas, 1906) - BP		<i>entretremo-nos numa espécie de raivinha roedora</i> (CRPC, 1993)
<i>raivosamente</i> ADV	<i>choramos [...] mais raivosamente quando vemos que não deixa Roma de ser outra moller era rraueosa et cõ a rrauea fogia como sandia por-los lugares desprobrados</i> (Mirages de Santiago, 14-15th)		Fechei os olhos raivosamente (CRPC, 1985)
<i>raivoso</i> ₁ ADJ	<i>ya raivoso assy cõmo se fosse hum leon brauo</i> (Cronica Troyana, 14th)		<i>não sabemos exactamente quantas pessoas tiveram contacto com o cão raivoso</i> (CRPC, 2004)
<i>raivoso</i> ₂ ADJ			Raivoso , rebuscou os bolsos e cortou as moedas reunidas (CRPC, 1996)

TABLE 3: WORD FAMILY	simple words	root derivatives	embedded derivatives	word derivatives	English gloss	t. a quo	t. ad quem	usage label
1.	<i>raiva</i> , N				'rabies'	14 th	C	
				<i>antirraiva</i> ADJ	'anti-rabies'	20 th	C	
		<i>raivoso</i> ₁ ADJ			'infected with rabies'	15 th	C	
2.	<i>raiva</i> ₂ N				'anger'	13 th	C	
				<i>raivazinha</i> N	'kind of anger'	17 th	C	
		<i>raivoso</i> ₂ ADJ			'angry'	14 th	C	
			<i>raivosamente</i> ADV		'angrily'	17 th	C	
		<i>raivento</i> ADJ			'angry'	19 th		unused
		<i>raivar</i> V			'to get angry'	13 th	C	rare
			<i>raivado</i> PP		'angry'	16 th	C	rare
		<i>enraivar</i> V			'to get angry'	19 th	C	rare (BP)
			<i>enraivado</i> ADJ		'angry'	19 th	C	rare (BP)
			<i>desenraivar</i> V		'to get rid of anger'	20 th		unused
		<i>enraivecer</i> V			'to get angry'	18 th	C	
			<i>enraivecido</i> ADJ		'angry'	19 th	C	
				<i>enraivecidamente</i> ADV	'angrily'	C		
			<i>enraivecimento</i> N	'getting angry'	C		rare	
			<i>desenraivecer</i> V	'to get rid of anger'	20 th	C	unused	
		<i>raivejar</i> V		'to get angry'	20 th		rare (BP)	
	<i>raivecer</i> V			'to get angry'	20 th	C	unused	
	<i>raivinha</i> N			'kind of anger'	20 th	C		
	<i>raivença</i> N			'kind of anger'	20 th		unused (BP)	

Finally, since the ultimate goal of ER is to demonstrate that this lexicographic model allows ulterior research, some maps were prepared in order to get a visual perception of the dissemination of some IE roots in European Languages related to the gloss ‘red’ and the semantic changes they have undergone²⁶.



²⁶ These diagrams were prepared by Simeon Tsolakidis.



The next stage of this project corresponded to its integration in the LandLex group. This new platform offered a more principled methodology to deal with the source information. It is now obvious that the access to heritage dictionaries must be facilitated through the availability of TEI versions of a selected set of

dictionaries. Since this group has brought together different research interests, we have shifted the targeted lexicon to a landscape vocabulary. Furthermore, and given the fact that we wish to produce in-depth descriptions in as many languages as possible, we have decided to select three words, the equivalents of the English words ‘*daisy*’, ‘*hill*’ and ‘*red*’. These words have motivated a significant number of particular studies that are the basis for the following chapters of this book.

Finally, ENeL has also facilitated the use of a cloud-based, open-source platform for writing and publishing dictionaries called Lexonomy (www.lexonomy.eu/). The ER prototype that is currently under development at www.lexonomy.eu/Landlex/ will be presented in the following section.

Encoding European Roots in XML and Lexonomy²⁷

In this section, we will explain how we have encoded the prototype dictionary European Roots in XML. The tool that we have used is Lexonomy (cf. Měchura 2017), a web-based software package for writing and publishing dictionaries.

We have designed an entry structure to accommodate some sample cases studied in the framework of the LandLex project. The departure point where three English words (‘*hill*’, ‘*daisy*’, ‘*red*’) and the research strategy was to identify the equivalents in other European languages. Many studies were carried out by LandLex members and some of them can be found the subsequent chapters. The dictionary prototype that we have developed, which is available for public consultation at <https://www.lexonomy.eu/Landlex/>, includes the Latin etymon *margarīta* and the contemporary words derived from this etymon (e.g. English *marguerite*, Estonian *margareeta*, French *marguerite*, German *Margerite*, Modern Greek *μαργαρίτα* Portuguese *margarida*, Romanian *margaretă*). Other sample entries (e.g. Latin *rābies*, PIE **ǵhelh₃-*, PIE **dheu-*, PIE **h₁reudh-*, Sanskrit *nāraṅga*), related to an earlier stage of the European Roots project, were also included, since they allowed us to test different lexicological requirements. Notice that this

²⁷ I wish to thank Michal Boleslav Měchura for all the help he provided in the creation of this version and the support in numerous technical issues.

dictionary prototype is called European Roots because we are trying to uncover our common basic lexical heritage, which is often found in Hellenistic Greek or Latin words, and sometimes it can go further back, reaching namely some PIE hypothetical roots.

The ER dictionary is thus a rather unconventional dictionary, for two reasons: (1) it promotes the shared etymons to the top-most level so that these words constitute the dictionary's macrostructure instead of being embedded somewhere deep in the microstructure of each entry, and (2) each subentry is a kind of 'mini-dictionary' in its own right, composed of 'mini-entries' with several headwords from several languages. Because of this structure, each entry allows for a straightforward contrastive analysis of the different ways in which the root has been accommodated by a larger or narrower multitude of European languages.

MAIN ENTRIES

Main entries of the ER dictionary prototype are the words that correspond to the shared etymon (e.g. Sanskrit *nâraṅga*) of the words that belong to the contemporary lexicon of different European languages (e.g. English *orange*, French *orange*, Italian *arancia*, Portuguese *laranja*). The choice of this lexicographic design aims to demonstrate the vicinity of neighboring or more distant languages, the ways that lexical dissemination have taken and still take in Europe, and substantive evidence to approach the emergence of lexical change.

The macrostructure of the ER prototype contains one single element, named <root_dictionary>:

(8) <Landlex>

```
<entry lxn:entryID='X' xmlns:lxn='http://www.lexonomy.eu/'>
```

```
<root_dictionary>
```

Then, the <root_dictionary> dominates a bundle of nine elements. The first eight elements help to describe the shared etymon word. The ninth element opens to a contemporary dictionary, which will be described in the following subsection:

(9) <root_dictionary>

```
<root_language> ... </root_language>
```

```
<transliterated_root> ... </transliterated_root>
```

```
<original_script> ... </original_script>
```

```

<partOfspeech> ... </partOfspeech>
<root_meaning> ... </root_meaning>
<etymon1> ... </etymon1>
<etymon2> ... </etymon2>
<OBS>
<contemporary_dictionary> ... </contemporary_dictionary>

```

The information regarding the shared etymon relies basically on what can be found through the analysis based on critically selected lexicographic sources, namely etymological dictionaries, and textual *corpora* (along the lines described in the previous chapter). Therefore, the <root_language> element identifies the language of the shared etymon (e.g. Hellenistic Greek, Latin); the second and the third elements contain the actual shared etymon. It may be recorded just once, if its original script is the roman alphabet, or twice if the original script is not – in that case, its transliteration must also be recorded, for the sake of readability. The etymon’s original script will also be provided, whenever we have access to a reliable source.

```

(10) <root_language> Sanskrit </root_language>
      <transliterated_root> nâraṅga </transliterated_root>
      <original_script> नारङ्ग </original_script>

```

The pos element contains the (broadly defined) part of speech of the root and information on other grammatical features, such as gender, if applicable. This element may be left empty if the information is not available. The etymon considered in (10) has a nominal nature:

```

(11) <partOfspeech> n </partOfspeech>

```

The subsequent element (i.e. <root_meaning>) has three child elements. The first (i.e. <definition>) contains a concise semantic gloss, in English. It may be followed by a <quotation>, if it is available. The last element of this bundle (i.e. <root_sources>) includes two child elements. The first one (i.e. <etymological_dictionaries>) holds a value list of the most prominent European etymological dictionaries; the second element (i.e. <other>) allows us to add relevant sources of a given specific nature. Sources are references, here mentioned by abbreviations.

All the references are listed in the LandLex Zotero bibliography that is open to public consultation at <https://www.zotero.org/groups/815103/landlex/items>:

```
(12) <root_meaning>
      <definition>orange tree</definition>
      <quotation>nāraṅgam āmrāphalāt madhurataram ‘an orange is sweeter than a mango’
      </quotation>
      <root_sources>
      <etymological_dictionaries>POKORNY</etymological_dictionaries>
      </root_sources></root_meaning>
```

The remaining elements regard the etymon of the shared etymon. In fact, some cases allow us to go further back and trace the etymon(s). The existence of <etymon1> and <etymon2> (eventually more) is related to the need to consider more than one etymological layer. This is the case of the Latin root *margarīta*, that has a Hellenistic Greek etymon (i.e. *margarītes*), which can be linked to the Iranian **mrga-ahri-ita-*. The element <OBS> allows us to further convey the information that this etymon is also related to the Middle Persian *marvārīt* and the Modern Persian *marvārīd*. All this information will be encoded as follows:

```
(13) <etymon1>
      <hypothesis> ... </hypothesis>
      <direction> < </direction>
      <etymon_language> Hellenistic Greek </etymon_language>
      <original_script>μαργαριτης</original_script>
      <transliterated_etymon>margarītes</transliterated_etymon>
      <partOfspeech>n_m</partOfspeech>
      <etymon_meaning>
      <definition> pearl </definition>
      <quotation> ... </quotation>
      <etymon_sources> ... </etymon_sources>
      <etymological_dictionaries>BEEKES</ etymological_dictionaries>
<etymon2>
      <hypothesis> ... </hypothesis>
      <direction> < </direction>
      <etymon_language> Iranian (</etymon_language>
      <original_script> ... </original_script>
      <transliterated_etymon>*mrga-ahri-ita- </transliterated_etymon>
      <partOfspeech>n</partOfspeech>
```

```

<etymon_meaning>
  <definition> 'lit. born from the shell of a bird, e.g. oyster' </definition>
<etymon_sources> ... </etymon_sources>
  <etymological_dictionaries>BEEKES</ etymological_dictionaries>
  <other> Gershevitch (1989)</other></etymon2>
<OBS>cf. Middle Persian marvārīt, Modern Persian marvārīδ</OBS>

```

Finally, the etymon elements contain a first element (i.e. <hypothesis>) that is used to mark alternative etymological hypothesis for the same etymological layer, whenever necessary. This is different from the above-mentioned existence of two or more etyma belonging to different etymological layers. The second element (i.e. <direction>) marks the chronological relationship. The following three elements display the language of the etymon, its original script, transliteration and pos. The last two elements (i.e. <etymon_meaning> and <etymon_sources>) are similar to the elements <root_meaning> and <root_sources>).

CONTEMPORARY DICTIONARIES

As mentioned above, the ninth element of the <root_dictionary> is <contemporary_dictionary>, an element that can be replicated whenever a cognate word is found in a different language²⁸. This element brings us from the oldest shared etymon to the headwords of contemporary dictionaries, which allows us to trace the paths through which the remote word has entered various European languages and how it has further evolved in them.

This element contains two child elements. The first one (i.e. <dictionary_language>) identifies the language, which, presently, is one of the following ten: English, Estonian, French, Galician, German, Italian, Modern Greek, Polish, Portuguese and Romanian. The second element (i.e. <headword>) encompasses the whole record of the word that descends from the root considered in the <root_dictionary>. This element may be replicated if more words derive from the same root.

²⁸ Presently, we can instantiate this element ten times, corresponding to the languages that are represented in the project.

```
(14) <contemporary_dictionary>
      <dictionary_language> ... </dictionary_language>
      <headword> ... </headword>
      ...
      <headword> ... </headword>
```

Headwords include eight elements:

```
(15) <headword>
      <word>
      <IPA>
      <partOfspeech>
      <meaning>
      <sources>
      <etymon1>
      <equivalents>
      <word_family>
```

The elements <word> and <IPA> provide the original script and the standard phonetic transcription of the headword, which is a relevant information irrespective of the writing system of each language, since it allows the users to have a physical perception of the word:

```
(16) <contemporary_dictionary>
      <dictionary_language>English</dictionary_language>
      <headword>
        <word>red</word>
        <IPA>[red]</IPA>
      </headword>
</contemporary_dictionary>
<contemporary_dictionary>
  <dictionary_language>German</dictionary_language>
  <headword>
    <word>Rot</word>
    <IPA>[ro:t]</IPA>
  </headword>
</contemporary_dictionary>
<contemporary_dictionary>
  <dictionary_language>Modern_Greek</dictionary_language>
  <headword>
    <word>έρυθρός</word>
    <IPA>[eruθros] </IPA>
  </headword>
```

```

<contemporary_dictionary>
  <dictionary_language>Portuguese</dictionary_language>
  <headword>
    <word>roxo</word>
    <IPA>[ʁoʃu] </IPA>
  </headword>

```

As before, the POS element contains the (broadly defined) part of speech of the word and information on other grammatical features, such as gender, if applicable.

The following element (i.e. <meaning>) dominates a new bundle of important elements:

```

(17) <meaning>
  <definition>
  <example_a_quo>
  <example_ad_quem>
  <dialect>
  <usage_label>
  <glosses>
  <image>

```

The element <definition> is similar to the element found above, in <root_meaning>, that is, it contains a concise semantic gloss, in English. The remaining elements are slightly distinct or completely new. In fact, each meaning must be textually documented by a dated quotation – the <example_a_quo> will illustrate the best earliest use of the given word meaning. If the word is still used, the <example_ad_quem> will not be filled. If the word became unused, the <example_ad_quem> will be filled by the latest attestation that should also be dated. In that case, the value UNUSED, from the element <usage_label> will be selected. If the word is rarely used, but can still be found, the element <example_ad_quem> is not filled, and the value RARE, from the element <usage_label> will be selected.

```

(18) <headword>
  <word>margarita</word>
  <meaning>
    <definition >pearl</definition>
    <example_a_quo>

```

```

<date>13th century</date>
<quotation>sobre ella nom parecia, se nom ouro e pedras margaritas preçiosas e
de gram vallor (Vidas de Santos de um Manuscrito Alcobacense)</quotation></
example_a_quo>
<example_ad_quem>
<date>19th century</date>
<quotation>margarita, s.f. Perola. Morais (1813) </quotation>
</example_ad_quem>
<usage_label>UNUSED</usage_label></meaning>

```

In some cases, certain meanings of the word have a dialectally specific usage. If that is the case, the <dialect> element will be filled by one of its language-specific values. In the case of Portuguese, the distinction between European Portuguese (EP) and Brazilian Portuguese (BP) is often required:

```

(19) <word>enraivar</word>
...
<meaning>
<definition >to get angry</definition>
...
<dialect>BP</dialect>

```

Each meaning must also be glossed into each of the other languages that participate in the project, and, if relevant, it should also be linked to an image²⁹ (eventually, a Wikipedia image):

```

(20) <word >laranja</word>
...
<meaning>
...
<glosses>
<English>orange</English>
<French>orange</French>
<Galician>laranxa</Galician>
<German>Apfelsine</German>

```

²⁹ It would be nice to illustrate some meanings with graphics, but the ability to embed graphics in Lemony requires manual customization, a goal that was not pursued for this prototype project. A way of overcoming this shortcoming is by providing a hyperlink that can be copied.


```

<Italian>arancia</Italian>
  <Modern_Greek >πορτοκάλι</Modern_Greek></glosses>
  <image>pt.wikipedia.org/wiki/Laranja#/media/File:OrangeBloss_wb.jpg</image>
</meaning>

```

Polysemic words require a repetition of the element <meaning>. That is the case of the Portuguese word *laranjada*, that encloses ‘orange preserve’, ‘strike with oranges’, ‘orange battle, and ‘orange juice’:

```

(21) <word>laranjada</word>
...
<meaning>
  <definition>orange preserve</definition>
  <example_a_quo>
    <date>Garcia de Resende (1516) Cancioneiro Geral</date>
    <quotation>Loba aberta a laranjada qua quy fez hũ bom senhor com quyra muy
    bem berada & mays venida de cor. </quotation></example_a_quo>
  <example_ad_quem>
    <date>Bento Pereira (1697) tesouro da Língua Portuguesa 2</date>
    <quotation>Laranjada, || id est, * conserva de laranjas. </quotation> </example_
    ad_quem>
  <usage_label>UNUSED</usage_label>
  <glosses>
    <English>marmelade</English></glosses></meaning>
<meaning>
  <definition >strike with oranges</definition>
  <example_a_quo>
    <date>Pereira, 1697</date>
  <quotation>Laranjada. Mali medici ictus.</quotation> </example_a_quo>
  <usage_label>UNUSED</usage_label></meaning>
<meaning>
  <definition>orange battle (Carnival)</definition>
  <example_a_quo>
    <date>Moraes 1813</date>
  <quotation>Laranjada. Pancada com laranja atirada, de ordinário pelo entrudo.</
  quotation></example_a_quo>
  <usage_label>UNUSED</usage_label></meaning>
<meaning>
  <definition>orange juice</definition>
  <example_a_quo>

```

```

<date>Marquês da Fronteira e Alorna (1854) Memórias</date>
<quotation>Em Bemfica dava eu grandes merendas aos collegiaes e, como era
prohibido o vinho, fazia servir com profusão laranjada e limonada, concorrendo
talvez assim, involuntariamente, para graves molestias</quotation></example_a_
quo></meaning>

```

The next element of the headword is <sources>. The first element (i.e. <etymological_dictionaries>) contains the same value list as <root_sources>. The remaining elements are monolingual *corpora* and dictionaries. In the case of Portuguese, the <Portuguese_corpora> element includes one historical corpus (i.e. CdP) and one contemporary corpus (i.e. CRPC). The element <Portuguese_dictionaries> includes two contemporary dictionaries ([INFOPEDIA] and [PRIBERAM]), and seven heritage dictionaries (i.e. [Cardoso], [Barbosa], [Pereira], [Bluteau], [Fonseca], [Moraies] and [Figueiredo]). The last element (i.e. <other>) allows to add relevant sources of any given specific nature, if necessary.

Each headword may also have an etymological specification if there is a gap between the main entry root and the language-specific headword (usually because there is a vehicular language).

```

(22) <root_dictionary>
    <root_language>Sanskrit</root_language>
    <transliterated_root>nâraṅga</transliterated_root>
<contemporary_dictionary>
    <dictionary_language>Portuguese</dictionary_language>
    <word >laranja</word>
    ...
    <etymon1>
    <direction><</direction>
    <language xml:space='preserve'>Italian</language>
    <form xml:space='preserve'>l&apos;arancia</form></etymon1>
    <etymon2>
    <direction><</direction>
    <language>Arabic</language>
    <form>nâranġa</form></etymon2>

```

Each headword may still be linked to other language-specific semantically related headwords (cf. equivalents):

(23) <word>margarida</word>

...

<equivalents>bem-me-quer; bonina; malmequer; pampilho</equivalents>

WORD FAMILIES

Under the last element of headwords (i.e. <word_family>), we will list all the complex words that are formed from the headword, by modification, derivation, compounding or conversion, and further embedded. Each of these word-formation processes heads a variable number of elements that correspond to a subclassification of the main process:

(24) <word_family>

<modification>

<evaluative_word>

<negation_word>

<opposition_word>

<location_word>

<repetition_word>

<derivation>

<deadjectival_noun>

<denominal_noun>

<deverbal_noun>

<deadjectival_adjective>

<denominal_adjective>

<deverbal_adjective>

<deadjectival_verb>

<denominal_verb>

<deverbal_verb>

<deadjectival_adverb>

<compounding>

<subordinated_compound>

<coordinated_compound>

<conversion>

<converted_adjective>

<converted_noun>

<converted_verb>

Each of these elements (i.e. <evaluative_word>, <deadjectival-noun>, etc.) dominates a bundle of elements that is partially similar to the bundle dominated

by headwords. Only the last two elements differ: <borrowing> is used to signal the loan of the complex word from a different language, if that is the case; and <embedded_word>, which hosts recursive word-formation, dominates the elements <modification>, <derivation>, <compounding> and <conversion>:

```
(25) <evaluative_word>
      <word>
      <IPA>
      <partOfspeech>
      <meaning>
        <definition>
        <example_a_quo>
        ...
        <example_ad_quem>
        ...
      <dialect>
      <usage_label>
      <glosses>
      ...
      <image>
    <sources>
    ...
  <equivalents>
  <borrowing>
  <embedded_word>
    <modification>
    <derivation>
    <compounding>
    <conversion>
```

Summary and outlook

In this chapter, we have presented the development of the prototype dictionary European Roots. The original design was submitted to a systematic discussion and testing, mainly in the framework of the LandLex group, and we expect to pursue the main goal of reaching an innovative pan-European lexical platform.

III. Outcomes from analytical TEI mark-up of dictionary entries

The problem of interlanguage diachronic and synchronic markup

Geoffrey Williams

In any prototypical picture of a landscape, hills are inevitably present. Most countries possess something that can be classified as a hill, but not all have mountains. However, as hill is a fairly simple word, it is apparently easily translated using bilingual dictionaries and easily understood at a gestalt level. This does not help us understand what the word actually means in context, how a user actually understands a word and its usages and relates it to their world knowledge and other lexical items. It above all means that speakers of other languages will fail to perceive the differences. Unfortunately, as will be seen with for example Portuguese and Romanian, even the word equivalence denoted in bilingual dictionaries can be simply wrong.

Depending on where you are in Europe, *'hill'* tends to be more frequent than *'mountains'*. In English, *'hill'* is a more frequent word for *'mountain'* simply because there are plenty of the former in Great Britain whereas mountains tend to be confined to Scotland, Wales or the north west of England in Cumbria. Following the Oxford English Dictionary (henceforth [OED 2000]), the word *'hill'* arises from Old English and is of Germanic origin, with a first mention circa 1000. The Germanic root is widely shared by other Northern European languages, whereas the romance languages generally take the Latin *collina* as a root, although the situation can be more complicated, as will be seen for Portuguese and Romanian. For the former, the main legacy dictionary [Bluteau] gives *'colina'* as synonym for

the older word *'outeiro'* (see Villalva et al, this volume). In Romanian, a variety of words can be found, but bilingual dictionaries tend to give either *'colină'* or *'deal'* as the best translations, which hides the wealth of possible wordings, and also the fact that a modern dictionary sees *'colină'* as more of a hillock than a hill (see Galleron this volume). In English *'mountain'* makes its appearance circa 1275 and is a borrowing from French. French obviously follows the Latin root, but has the added complication of the word *'mont'* (mount), which also exists in English with a similar usage to modern French, whereas the word actually predates *'montaigne'*. Thus, although *'hill'* and *'colline'* arise from totally different roots, there is a great deal of interaction with related words and also potentially with phraseological units give the shared word histories between the two languages.

In addition to hill and mountain, a third word must be introduced, *'hillock'*, or small *'hill'*. This increases the problem as although it can be translated as a small hill, *'butte'* in French, it can also refer to a man-made elevation of the earth whereas hill is primarily a natural elevation. Thus, we have a continuum running from small hill to mountain, but in which the first element is essentially a diminutive of hill whereas hill is generally contrasted with mountain. We shall thus concentrate on the hill – mountain pair, but reference to the smaller unit and other related wordings will also occur.

Landscape language has a number of words where there are of necessity continua, *'hill'* and *'mountain'* is one, *'stream'* and *'river'* another. Where *'hill'* stops and *'mountain'* starts is largely a question of degree, and depends very much on the geographical and geological aspects of any given country. This is well expressed by the entry for *'hill'* in [OED online]:

A natural elevation of the earth's surface rising more or less steeply above the level of the surrounding land. Formerly the general term, including what are now called mountains; after the introduction of the latter word, gradually restricted to heights of less elevation; but the discrimination is largely a matter of local usage, and of the more or less mountainous character of the district, heights which in one locality are called mountains being in another reckoned merely as hills. A more rounded and less rugged outline is also usually connoted by the name.

A dictionary provides information in a variety of ways, not all of which are present in any one dictionary. In the above example, we have a definition followed by encyclopaedic information, the full entry also gives an etymology and quoted sources. Other dictionaries may contain examples, made-up or authentic corpus data, idioms and collocations, a wealth of data that needs to be analysed and contrasted. The means adopted in LandLex is using XML-TEI, encoding individual entries from the LandLex database of dictionaries. Contrast is between time periods, related lexical units and languages. This means that we must not only see how *'hill'* and *'mountain'* are portrayed in dictionaries in different languages, but also find a means to show how the continuum works within a language and across languages. For this we shall be calling upon lexicographical prototypes (Hanks 2000) and their adaption to multilingual contexts (Williams, Piazza, et Giuliani 2012).

Thus, *'hill'* is a prime case where there is a clear need not only to provide an analytical and computational framework for the study of the words, but also a practical means to display variations and make that knowledge available. This we propose to do using the European root model, described earlier in this work, and the use multilingual lexicographical prototypes. In computational terms, the data will be displayed and analysed using TEI-XML mark-up. To illustrate the use of the TEI and multilingual lexicographical prototypes, we shall look at the words *'hill'* and *'mountain'* in English and French, but also draw in examples from other languages.

From portal to dictionaries

The ENeL Dictionary Portal provides access to many contemporary and some legacy scholarly dictionaries for a wide number of languages. Unfortunately, very few legacy dictionaries have been digitised, and even less are available as open source, and this is what scholars, particularly those working within the paradigm of Digital Humanities, require Interfaces are only ever answering other people's questions when access to the data itself allows its enriching so as to answer new questions.

The LandLex Zotero database has allowed us to list what we consider the most appropriate legacy and contemporary dictionaries, the difficulty lies in ensuring that the entire team has access to all the data and a suitable analytical model. Most of the data is available in PDF format, which makes Atlas ti an excellent tool for individual analysis. However, in order to go deeper into the texts and to make the comparative data available, it was decided to use TEI-XML mark-up for the words ‘hill’ and ‘mountain’. Insofar as many of the dictionaries we shall need to look are under copyright, we only illustrate parts of an entry. The base model would be that created with ENeL Work group 2, TEI-Lex o¹, but with added detail added as the need arose. Each language has its own file with the different entries being encoded separately with one per period and per key word.

The best way to illustrate the mark-up procedure is to take an example, in this case ‘colline’ as described by Antoine Furetière in the 1690 version of his ‘Dictionnaire Universel’ (Furetière 1690). This is a useful starting point as Furetière produced an encyclopaedic dictionary, generally with full definitions as opposed to the simple definition by synonym found in earlier works. He also makes extensive use of example and citation as well as giving etymologies and word histories.

```
<entry xml:lang="fr" ana="#Colline">
  <ref ana="#F1690_ark_bpt6k50614b"> Furetière 1690</ref>
  <form><orth>COLLINE</orth></form><gramGrp><pos
expand="common_noun">s. </pos><gen expand="feminine">f. </gen></gramGrp>
  <sense n="1"><def>Petite coste élevée au dessus de la plaine. <def>
  <cit type="example">
    <quote>Les vignobles sont ordinairement sur les <hi>collines</hi>.</quote>
  </cit>
  <cit type="example">
    <quote> On a fait ce bastiment sur la <hi>colline</hi> pour avoir l'avantage de
la veuë, et le moyen d'y faire des terrasses. </quote><bibl
ana="Abl_ISN000000107866286"></bibl>
```

¹ docs.google.com/document/d/1GPfXG3KtwApTSyAfyM3soVAiw2IyVXbnHGsfAVM7N4/edit#heading=h.s5tdfuehiq77 (December 2018).

```

</cit>
<etym>Ce mot vient de <foreign xml:lang=>lat>>collina</foreign>, diminutif de
<foreign xml:lang=>lat>>collis</foreign>. <bibl
ana=>#Men_ISN000000080815971>>Menage.</bibl></etym></sense>
<sense n=>2>><usg type=>proverb>>On dit proverbialement, qu'un homme a gagné
la colline, pour dire, qu'il a pris la fuite, qu'il s'est mis en lieu de seureté.</usg></sense>
</entry>

```

The first lines are references to the overall LandLex word list and also to the work from which the entry has been extracted, this is followed by the headword itself and the accompanying grammatical information. In the rare cases where grammatical information is not provided in the dictionary text, the information would still be given through descriptive XML attributes. Attributes also serve to have a standard set of word descriptions, initially in English as a hub language, but others can be added too.

We expect dictionaries to follow a relatively predictable pattern, and from the mid-nineteenth century on this has been largely the case. However, legacy dictionaries followed their own rules, for example, if Furetière provided pronunciation information, it might be with the headword, but is often more as a commentary later in the text. Insofar as the information is encoded within named elements, as <pron> for pronunciation, this is not a problem as we extract data rather than sequences of text. This holds for syntactic information, examples, etymologies, in fact all the standard pieces of information that we might find in a dictionary.

All the dictionaries used in LandLex define the word in some way, so the <def> element is used to isolate this.

```

<sense n=>1>><def>Petite coste élevée au dessus de la plaine. <def>

```

In this case a full definition is given, whereas the earlier Nicot dictionary (1604) only gives a Latin equivalent without any explanation as <sense><def>Collis</def></sense>. In the Portuguese Bluteau dictionary (1712), a number of possible words for 'hill' are given, but 'colina' simply receives a synonym as a definition - <sense><def>Outeiro</def>. As will be seen later, this is illustrating a recent introduction with an older word. In the case of Estonian (see Metsmägi & Oja,

this volume), monolingual dictionaries are recent with the dictionary record being largely limited to bilinguals with German. Thus, the entry for 'kenk' gives the German translation equivalent, Hügel, and also informs us that the word is dialectal:

```
<entry>
<form><orth>kenk</orth><gramGrp><gen>G.</gen></gramGrp><orth type="genitive"
extent="part">kengo</orth><c></c></form>
<sense><cit type="translation" xml:lang="Deu">
<quote>Hügel.</quote>
</cit><usg type="dialect" ana="#Est_d_d">d.</usg></sense>
```

In all cases, attributes can be used to describe the defining style once a sufficient amount of data has been encoded. In the example shown here from the Furetière dictionary, the definition stands alone, but in other entries more encyclopaedic data is supplied, in which case we add <note> so as to hold the data awaiting further analysis.

Not all dictionaries contain citations and examples, but Furetière makes ample use:

```
<cit type="example">
<quote>Les vignobles sont ordinairement sur les <hi>collines</hi>.</quote>
</cit>
```

These exemplify word usage and supply important information for understanding the underlying meanings of words. Furetière may also use them to demonstrate the declination of a verb. In the case of examples and citations, the <cit> element contains both the actual example and citation as <quote>, but in the latter case also contains the bibliographical information supplied.

```
<bibl><author ana="#Men_ISN000000080815971">MEN.</author></bibl>
```

The author or work cited generally follows the citation, but this is not always the case, but once again, extraction systems do not care about this as they simply link text to author. Sometimes, both the author and work are mentioned, as with the entry for 'colline' in the Littré dictionary :

```
<bibl> <title></title> <author ana="#Chenier_ISN0000000121288574">Chénier, </author>
<title ana="#Chenier_Elegies">Élég. XI</title></bibl>
```

Insofar as an author or work may be cited several times, reference is always made to a bibliographical reference section that lists more detailed information about the author or work. The text may give the full name, Chénier as in the Littré), or an abbreviation, MEN, as in Furetière, but the identifier is unique and makes use of the International Standard Name Identifier² for the author so as to avoid ambiguity. As we are comparing across several languages, the use of an ISNI code is vital as the same person may have his or her name written in a variety of ways, or in an entirely different alphabet as with the case for Cyrillic. We shall come back to this.

Word histories and etymologies are not always present, but when they are they are grouped within the <etym> element. Words in languages other than that of the text are marked as foreign with the appropriate identifier for the language, as with <foreign xml:id="lat">. As shown above, the whole can appear as such:

```
<etym>Ce mot vient de <foreign xml:lang="lat">collina</foreign>, diminutif de
<foreign xml:lang="lat">collis</foreign>.
<bibl ana="#Men_ISN000000080815971">Menage.</bibl></etym>
```

In Portuguese, where several translation equivalents of ‘hill’ are possible, Bluteau gives us the different etymologies for ‘colina’, the introduced word:

```
<etym>Derivase do Grego Colonòs, que he Eminencia, Altura. </etym>
```

and for its older counterpart ‘outeiro’:

```
<etym>Os que investigàraõ a etymologia de outeyro, querem que se derive do Grego <foreign
xml:lang="gre">Optomai</foreign>, que quer dizer vejo; & na lingua Castelhana Otear he
olhar de lugar alto para o campo.</etym>
```

Whilst Furetière tends towards lengthy word histories that follow the definition and discussion, Bluteau goes for shorter comments, but does complete his entry for ‘outeiro’ with a copious <note>. In English, Johnson goes for the much more

² www.isni.org

terse <etym>Hil [Saxon]</etym> accompanying the headword data, which is very much in line with modern practice.

The above gives the general structure for all the entries we are encoding. The aim is to supply a basic structure that can be developed later by other scholars and also to link to personographical and bibliographical information. To take the example of Ménage, a well-known 17th century lexicographer and etymologist, we have recorded him more fully in a bibliographical index as:

```
<person xml:id="Men_ISN000000080815971">
  <persName>
    <forename>Gilles</forename>
    <surname> Menage</surname>
    <roleName/>
    <addName/>
    <abbr>Men</abbr></persName>
    <birth when="1613-08-15"> 15 août 1613 à <placeName>Angers</
placeName></birth>
    <death when="1692-07-23"> 23 juillet 1692
      à <placeName>Paris</placeName></death>
    <sex>Masculin</sex>
    <nationality>Française</nationality>
    <faith>Catholique</faith>
    <education/>
    <occupation/>
    <affiliation/>
    <socecStatus/>
    <note>grammairien, linguiste, écrivain, critique littéraire</note>
    <event>
      <desc corresp="#Menager1650">Origines de la langue française,
        <date>1650</date></desc>
    </event>
    <idno type="ISNI">http://www.isni.org/isni/0000000080815971</idno>
    <idno type="URI"> https://fr.wikipedia.org/wiki/Gilles_Ménage_
(grammairien)</idno>
```

Ménage was one of the two main etymological sources used by Furetière, and he continues to be used by contemporary lexicographers. As with all sources, we endeavour to link to both author and sources in a systematic way as below.

```

<biblStruct type="book" xml:id="Ménage1650"
  corresp="http://zotero.org/groups/815103/items/AHSBWPAl">
  <monogr>
    <title level="m">Les origines de la langue française</title>
    <author corresp="#Men_ISN0000000080815971"><forename>Gilles
</forename><surname>Ménage</surname></author>
    <imprint>
      <pubPlace>Paris</pubPlace>
      <publisher>Augustin Courbé</publisher>
      <date>1650</date>
    </imprint>
  </monogr>
  <idno>BNF:ark:/12148/bpt6k10402303</idno>
</biblStruct>

```

There are several reasons for this developed database. The obvious one is to make works available to dictionary users who want to read beyond the citation. With hyperlinking, dictionaries could play an important educational role in giving access to texts and not simply a citation. Access also means the ability to analyse the data itself, thereby getting closer to the dictionary writer's 'corpus', a precious tool in historical lexicography. However, in the LandLex context it above all gives greater insight into the use of a lexical item, and when translations of the works are available may be a tool in helping understanding usage in another language and culture. It is thus important to study who is quoted, and if possible why.

Furetière (1690 & 1701) gives only one direct citation, from Ablancourt, and does not cite the actual work:

```

<cit type="example">
  <quote> On a fait ce bastiment sur la <hi>colline</hi> pour avoir l'avantage de la veüe, et le
  moyen d'y faire des terrasses. </quote> </cit>

```

The citation is clearly used purely to add information, in this case we learn that hills provide views and that they may be terraced, thereby adding to the previous information that they can be used for vineyards. Choice of author is governed by the usefulness of the actual wording, there is no expertise on 'hill'

brought in, even this author is often quoted by Furetière and must be seen as an essential part of his 'corpus'.

Turning to English, Johnson (1755) has recourse to five different citations:

"My sheep are thoughts, which I both guide and serve; Their pasture is fair hills of fruitless love."

Sidney.

"Jerusalem is seated on two hills, Of height unlike, and turned side to side." Fairfax.

"Three sides are sure imbar'd with crags and hills, The rest is easy, scant to rise espy'd; But mighty bulkwarks fence the plainer part: So art helps nature, nature strengtheneth art." Fairfax,

"When our eye some prospect would pursue, Descending from a hill, looks round to view."

Granville.

"A hill is nothing but the nest of some metal or mineral, which, by a plastick virtue, and the efficacy of subterranean fires, converting the adjacent earths into their substance, do increase and grow." Cheyne's Phil. Princ.

All are essentially literary and reflect Johnson's library. They are mostly easily sourced, the first Sidney's *The Arcadia* poems, then two from Fairfax's *Recovery of Jerusalem*, Granville's to collections of poems published by Johnson himself, and the last being Cheyne's *Philosophical Principles*. This is all in line with Johnson's policy of quoting the 'best authors', and is more about prestige than useful scientific content. Nevertheless, the first does tell us that hills are places of pasture for sheep, whilst Fairfax brings in the notion of crags. Granville informs us to the view, prospect, nicely echoing Furetière's quote from Ablancourt. Cheyne is far from scientific in his description.

We thus have two very different approaches to quotations, but both of which could be linked to source data enriching the reader's experience, albeit through the language of the dictionary itself.

In Grimm's *Wörterbuch*, extensive use is made of the bible, again a reflexion of the culture in which the dictionary was created. This opens up the direct comparison using translated texts as in the following example.

<cit type="quotation">

<quote>denn werden sie anfahen zu sagen zu den bergen, fallet uber uns, und zu den hügel, decket uns. </quote>

<bibl corresp="#KJV_Luke_23_30">Luc. 23, 30;</bibl>

<item xml:id="KJV_Luke_23_30">Then shall they begin to say to the mountains, Fall on us; and to the hills, Cover us.</bibl>King James. St Luke 23, 30</bibl></item>

The Bible has the advantage of existing in all European languages, whereas the work cited by Johnson and Furetière tend not to have been translated. However, many more recent works are available in a variety of languages thus opening the possibility of exploring the contrasts revealed through the translation process and possibly getting closer to the connotative meaning in other languages. This contrastive approach does not always work as translator strategies may differ. In the following biblical citation found in the Trésor de la Langue Française informatisé the gods of the Syrians are mountain gods, whereas in English it is hills that are evoked.

<quote>Les Syriens battus par les Israélites disaient à Benhadad leur Roi; ils ont été les plus forts, parceque leurs Dieux sont les des Dieux de montagnes; mais combattons dans la plaine </quote>< bibl>1. Liv. des Rois Ch 20

</bibl>

<item>And the servants of the king of Syria said unto him, Their gods are gods of the hills; therefore they were stronger than we; but let us fight against them in the plain, and surely we shall be stronger than they.< bibl>1 Kings 20, 23</bibl>

The Bible is a very particular case of an interpreted text, so it is hoped that literary works will give a more faithful picture.

The TEI is a very powerful means for making data available for research and consultation. Obviously, LandLex may use a wide variety of dictionaries for research purposes, but what can be made publically available is obviously limited by copyright, and for legacy dictionaries, by the time it takes to encode in TEI. Hopefully, an increasing number of legacy dictionaries will be put online as open source as digital research means access to data so as to apply deeper levels of encoding to answer precise research questions as happens when marking up for lexicographical prototypes.

Multilingual Prototypes

It seems clear that both bilinguals and monolinguals fail us. This is partially the fault of the dictionaries themselves, but largely the fault of a strange notion that dictionaries can be purely descriptive without betraying the cultural assumptions that underlie word meaning. What we find in coding and comparing dictionary data

is that there is no systematic description of a concept and the extra information that can be supplied by examples and citation is highly variable, particularly in dictionaries where citations are used for prestige content rather than to illustrate usage. Lexicographical prototypes provide a means to look at the inherent polysemy and meaning variations amongst words that are on a sense continuum.

Hanks (Hanks 1994, 2000) developed lexicographical prototypes to handle polysemy as a continuum using Wittgenstein's notion of family resemblances and an open lists system. . Basically, units of meaning are displayed as a series of short propositions that are, relatively, unambiguous. He used the example of bank to show how this works, here we shall illustrate it with 'hill' and show how the propositions are then coded in TEI.

Let us go back to Furetière's definition of hill "Petite coste élevée au dessus de la plaine". This can be broken down into two short propositions "legère pente" (light slope) and "au-dessus de la plaine" (above the plain). If we then look at all the other definitions from the LandLex corpus of French dictionaries we have a whole series of propositions that describe 'colline'. If the same process is repeated for 'montagne', we can see a list of possible descriptors for these two natural phenomena (see annexe 1). Following Hank's method, it is simply a matter of ticking the list to see where overlap occurs or where particular cases of meaning arise.

If this can be done for one language, it can be done for all. This entails translating the list thereby transforming the monolingual prototype into a multilingual one. Obviously, the subsequent list will therefore lengthen allowing national particularities to be visible, but the Wittgenstein approach allows for broad lists and our approach seeks to show what is specific to any one language or culture.

In the TEI marked-up text, we declare parts of the entry as segments, <seg> with each segment be linked to the standardised list of prototype propositions. Thus, in (Furetière 1690), we read

```
<sense n="1"><def><seg corresp="#light_slope">Petite coste </seg>
```

<seg corresp=>#raised_ground>élevée</seg><seg corresp=>#above_plain>> au dessus de la <ref
corresp=>#plaine>>plaine</ref>. </seg></def>

Whereas the contemporary Dictionnaire de l'Académie Française (Académie Française 1694) reaffirms the slope, but treats 'colline' as being a small mountain rising above a plain.

<def><seg corresp="small_mountain #low_height">Petite montagne </seg><seg
corresp="light_slope">qui s'esleve doucement </seg><seg="above_plain">au dessus de la
plaine. </seg></def>

This definition remains stable in consequent editions of the Académie dictionaries and the notions of 'small mountain', without defining 'small' also appears in the later Larousse (Larousse 1856) whilst the Littré (É. (1801-1881) A. du texte Littré 1873; É. Littré s. d.) prefers the more neutral 'raised ground'. The more recent historical dictionary Trésor de la Langue Francaise informatisé (Imbs et Quemada 1971) reaffirms what has already been said.

<def><seg corresp=>#low_height>>Relief de faible hauteur </seg><dont
<seg corresp=>#light_slope>>la pente est généralement douce.</seg></def>

However, the *Trésor* supplies abundant citations, the second of which tends to contradict its definition by accepting steeper slopes. It must be said that citations in this dictionary do tend more to prestige usage than to illustration.

<cit type=>citation>> <quote>Une colline assez raide la seule saillie de ce plateau nivelé (...) se
profilait devant nous

</quote><bibl>

<author ana=>#Gracq_ISN000000121434842>GRACQ.</author>

<title ana=>#Rivage_des_syrtes_1951>Le Rivage des Syrtes,</title> 1951, p. 162</bibl>

If we now compare with English, we can note that hills did not greater inspire Johnson (Johnson 1785) who succinctly describes 'hill' as:

<def><seg corresp="raised_ground">An elevation of ground</seg>
<seg corresp="lower_than_mountain">less than a mountain.</seg> </def>

The current version of the OED, as shown earlier, is more detailed and does inform us that the slopes can be more or less steep, hence the more general attribute of 'sloped ground'. It also ads that the elevation is natural, an

important means of distinguishing hills from man-made mounds as tumuli. The lengthy note in the OED entry brings in further information as to heights, but this seems to be specific to different language/country pairs as a contemporary Italian dictionary (*Lo Zingarelli*, s. d.) shows that an actual height can be given for hill as being less than 600 metres, *non supera i 600 m di altezza*. In Romanian, hills got bigger over time so that in 1929 (Saineanu 1929) a hill is a maximum of 300 metres, whereas a 2009 work (Academia Romana, Institut « Iorgu Iordan » 2009) gives this as 1000 metres. The comparative nature of defining is maintained in the OED entry for ‘mountain’

- a. A large natural elevation of the earth's surface, *esp.* one high and steep in form (larger and higher than a hill) and with a summit of relatively small area.

With the Ordinance Survey now accepting a height of 2000 feet (609 metres), there are precious few mountains in England, and even less if we adopt the Romanian criteria. For the prototype, we could take the rounded 600-metre height, which might raise a few English hills in status, but in comparative terms exact heights can only be used in local circumstances. Few dictionaries are as specific as the Zingarelli or the Romanian Academy, which makes sense as figures are purely arbitrary and whatever is said, the Black Mountains of Wales and the Menez Du (Black mountains) of Brittany will still be mountains by name even if they do not make the height criterion as after all, until the 1920s, the British ordinance survey put the limit at only 1000 feet (304 metres).

Extracting the definitions and tagging them for prototype elements we can compare a series of languages to see variations across dictionaries, across time, and above all across languages. Thus,

<def>Небольшая возвышенность, обычно округлой или овальной формы, с пологими склонами.</def>³

can be broken down into:

³ The Russian data and its base TEI mark-up have been provided by Kira Kovalenko. See chapter 7 for her discussion of the word ‘hill’ in Russian.

<def><seg type="elevation" ana="#raised_ground">Небольшая возвышенность</seg>, <seg type="shape" ana="#round #oval">обычно округлой или овальной формы,</seg> <seg type="slope" ana="#light_slope">с пологими склонами.</seg></def>

The prototype is now enriched with ‘shape’, something that to date other dictionaries have not mentioned (see Kovalenko, this volume). The Russian entry can now be compared to one from a German dictionary (Sanders 1860), which uses the notion of raised ground, and confirms the comparison with mountain found elsewhere, but introduces the notion of ‘lower than’ rather than ‘small’ to describe height.

<def><seg corresp="#raised_ground">erderhöhung von mäßigem umfange,</seg>
<seg corresp="#lower_than_mountain">geringer als berg,</seg>

Similarly, in Romanian, the noun ‘deal’ can be defined as lower than a mountain but higher than a hillock, which does means defining both ‘mountain’ and ‘hillock’ to get a clear picture. If we turn to Portuguese and look at Bluteau, we find ‘outeiro’ as:

<seg corresp="#piece_of_land">Lombo de terra,</seg>
<seg corresp="#above_plain">que se levanta da <ref corresp="#planicie"> planicie</ref></seg>,
& faz hum alto donde se descobre campo. </def>

Whilst Grimm gives the German word ‘Hügel’ as:

<sense n="1"><def><seg corresp="#raised_ground">erderhöhung von mäßigem umfange,</seg>
<seg corresp="#lower_than_mountain">geringer als berg,</seg></def>

Insofar as ‘hill’ and ‘mountain’ are continua, dictionaries must invariably compare the two and overlap is inevitable, and this is precisely what the prototype shows. The aim is in no way to give an ‘exact’ translation, but to allow the non-Russian or non-German speaker, for example, to understand the gist of what the definitions in other languages as, for example, English or French. The other advantage of prototypes is their ability to evolve: they are not closed sets, but one that evolves allowing to also handle more specialised. Another advantage of this model is that there is no hub language; each language combination is equally as

valid. English has only been used for convenience sake here and the identifiers will ultimately be replaced by neutral codes linked to a multilingual reference list.

So, what is a hill?

If we follow the prototype, the following table provides what may be considered the core features in four languages.

ENGLISH	FRENCH	PORTUGUESE	GERMAN
sloping ground	pente	inclinação	Anhöhe
light slope	legère pente	ligeira inclinação	leichte Anhöhe
above the plain	au-dessus de la plaine	acima da planície	über der Ebene
small mountain	petite montagne	pequena montanha	kleiner Berg
low height	petite hauteur	baixa altitude	geringe Höhe
raised ground (natural)	terrain élevé	terreno elevado	Erhebung im Boden

None of the dictionaries consulted contain all the featured elements, but this is quite normal in Hank's lexicographical prototypes (Hanks 1994) as this is an open list. None of the dictionaries consulted to date actually say that this is natural raised ground, although it is an important factor that differentiates '*hill*' from, for example, a slag heap, which can have the other characteristics, but is man-made in the same way as a funeral mound is not a hillock, a small hill. Missing features can be added without endangering the notion of prototype. Some features will be central, others peripheral, but the peripheral can be specific in one language, or country, or at a period in time. For example, in Portuguese, a number of words for '*hill*' can be found with '*colina*' and '*morro*' being recent introductions that partially supplant earlier words, but of which the former is used in European Portuguese and the latter being preferred in Brazilian Portuguese (see Villalva et al this volume).

Whilst the core elements allow us to obtain what is essentially '*hill*', but defining is not all as we may want to know how the concepts are perceived in different countries thus introducing an essential cultural element displayed over time and through language and geographical variations. In her 1941 account of pre-war Yugoslavia (West 1941), the travel writer Rebecca West insists on 'naked hills' as seen during her journey from Zagreb to the coast. This is simply because

to most English people hills are green, but in Romanian, the collocation '*dealuri aride*' points to barren hills. This is where encyclopaedic entries and dictionary examples come in as they are witnesses to the wider picture. For French, Furetière describes hills as being covered with vines, also true for '*deal*' in Romanian, but this not something to be found in England or Estonia. In Portuguese, [Bluteau], says one feature of a '*hill*' is that it can be tree covered. As Galleron shows for Romanian, choice of word form is also culturally important as the picture given for '*deal*' is far richer than for '*colină*' so that if a reader really wants to know how the landscape feature is perceived, it is to '*deal*' that they must turn.

Summary and outlook

'*Hill*' may be a simply word, but the cross-linguistic reality is far from simple. Not only do we have to deal with a cline between hillocks, hills and mountains, but we have enormous lexical variety across time, languages and countries. The main difficulty is in making this wealth apparent and going beyond the often incorrect simplicity of bilingual dictionaries, and even beyond the core information found in definitions to show how landscape features are actually perceived. To explore the linguistic wealth in dictionaries, a number of hurdles have to be overcome. The first task is making the data available showing what dictionaries exist for different languages. This we tackle through the LandLex dictionary database, a tool that seeks to be complementary to the European Dictionary Portal as pointing to both digitalised and non-digitalised works. More and more legacy dictionaries are being made available in digital format, but often only as PDF, which is why we are pioneering the use of CAQDAS as Atlas ti to explore such documents. Gradually, other dictionaries are becoming available as fully digital TEI-XML documents, and when not, we aim to provide at least a TEI version of our keywords. Use of the TEI provides an international standard that allow other researchers to extract data and thereby explore, for example definitional patterns and etymologies, the latter being key elements in the discovery of European roots and the variations that real and folk etymologies can bring in. It also allows to

build on existing data so as to add finer mark-up such as what we propose with our of prototypical elements.

The multilingual lexicographical prototypes are seen as a means of making meaning patterns available, to see what is underlined in any particular dictionary, whatever the language in which it is written. This prototype model is seen as truly multilingual, there is no single hub language, the system can be entered through any of the languages described. This will not only help users access dictionaries in languages other than their own, but make comparative analyses possible. As will be seen in the following chapters, the situation in Romance languages is far from simple. Portuguese is a world language with developing differences between European and South American usage. Romanian, another romance language has influences from a variety of other languages, notably a strong Slavic influence. Estonian lexicography has clear German influence, whereas the language itself leads to Finno-Ugric groups that wait to be explored. Our prototype model aims to help demonstrate these influences, but also to give access to the enormous wealth of information held in accompanying lexicographical input, the examples and citations. As a model, it can be easily applied and used through XML technologies, but our aim is to go beyond that so as to develop ways in which the information can be built into new electronic dictionary models in the same way as roots have been explored using the online lexicology tool (see Villalva, in this volume). Much remains to be done, but a model has been tried and tested, and explorations of simple words as *'hill'* have been undertaken, as the following chapters will clearly demonstrate.

Words denoting ‘hill’ in Estonian dictionaries

Iris Metsmägi & Vilja Oja¹

As described by Williams in the introductory part of this section, it depends very much on the geographical conditions of the country, how the language classifies higher places in the landscape, i.e., where a ‘hill’ stops and a ‘mountain’ starts or whether a difference is made between them at all. When discussing the words for ‘hill’ in Estonian, we must consider what does the relief of Estonia look like. Estonian average elevation reaches about 50 m. The highest elevations are in the hilly southeastern area. The country’s highest peak, called *Suur Munamägi*, reaches 318 meters above sea level, but its maximum height from the foot of the hill is only 62 meters. Thus Estonia belongs to the countries that have no real mountains. Respectively, we can imagine that all Estonian words denoting higher places in the landscape referred initially to what is generally understood as a ‘hill’. When it was necessary to refer to a real mountain in different geographical environment, the most common of these words (*mägi*) was used also for that, i.e., the meaning of this word was simply extended. This situation is very well reflected in the English-Estonian dictionary: the Estonian equivalents of the English noun *hill* are *küngas*, *kink*; *mägi*; in compounds also *kuhi*, *hunnik* (Silvet 2009: 537); the Estonian equivalent of the English *mountain* is only *mägi* (+ figurative equivalents *suur hunnik*, *kuhi*) (740). Consequently, there is no special word for ‘mountain’ in Estonian. The words *küngas*, *kink* and *mägi* are used to denote

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'hill' in modern common Estonian most often; the words *põnt* (~ *põndak*) and *põnk* are less known. In Estonian regional dialects there are several other words for various types of higher places, like *komp*, *kont*, *mätas*, *rõun*, *süri*, *nukk*, *rünk*, with various phonetic and derivational variants (some of them belong also to the standard language but their semantics is different there). These words will be left aside below, as well as some geographic terms for different types of hills, used in standard language but having no dialectal background, e.g., *voor* 'drumlin' (cf. Fin. *vuori* 'mountain').

Before starting to describe the Estonian words for 'hill' in dictionaries, the historical background of the Estonian lexicography should be briefly introduced. The tradition of written Estonian is relatively young compared to many other European languages. No written texts are available before the 16th century; the first dictionaries were compiled in the 17th century. The difference between North- and South-Estonian dialect groups is remarkable. In 17th-18th century they were treated as separate languages and they both had their own literary tradition. All the 17th-19th century dictionaries are bilingual (German-Estonian or Estonian-German), and they were compiled by people who were not native speakers of Estonian. The beginning of the tradition of monolingual dictionaries is strongly connected with the formation of the independent Republic of Estonia in 1918 and the new role of Estonian as the official language of the state. This tradition was carried on through the years of Soviet occupation and naturally, it is continued in modern times.

Six Estonian words denoting 'hill' in historical bilingual and contemporary monolingual dictionaries, will be discussed in the present paper. These words are *kink*, *küngas*, *mägi*, *põnt*, *põndak*, and *põnk*.

kink* and *küngas

It is practical to treat the Estonian words *kink* (GEN *kingu*) and *küngas* (GEN *künka*) in the same subdivision, since they seem to belong etymologically together. They might be regarded as phonetic variants of same stem. In Estonian dialects,

more variants are recorded, like *kenk*, *künk*, *kõngas*, *kõngas* (see more details below). It must be pointed out that the phonetic variability, particularly that of the quality of vowels, is at least partly irregular. (The ending *-as* in *kõngas* can be added, following the pattern of other words, cf., e.g., *hammas* (GEN *hamba*) ‘tooth’. There are many examples about merging this component in Estonian.)

The words have etymological equivalents in the closest cognate languages, i.e., in the other Finnic languages: Livonian *kēnka*, *kīnka*, *kūnka*, Finnish *kenkku*, *kenkas*, *kengäs*, *könkkä*, *köngäs*, Karelian *kenkku* ‘hill’ (probably borrowed from Finnish) (SSA I: 343, 485), and probably Izhorian *künkerä* ‘tuft’ (*-rä* can be regarded as suffix) (EES: 214). Like the Estonian variants, the cognate language words show phonetic irregularities. The etymological dictionaries of Estonian and Finnish have tried to overcome the problem of the unusual variation of vowels, characterizing the words as “descriptive” (see, e.g., EEW: 834, 1175–1176; SSA: 343). This explanation cannot be considered sufficient, because the words denoting ‘hill’ hardly represent expressive lexis. No equivalents have been found in the other groups of the Uralic languages so far. An attempt has been made to suggest a Germanic loan source to the words (Katz 1990: 32–33) but this is rightly rejected (LÄGLOS: 81). Some other speculations about possible etymological connections of these Finnic words have been made, too (see Vaba 1995: 82; Ahlqvist 1998: 21–22). So far, it is only possible to accept that they belong to the genuine Finnic vocabulary.

A variant of the word *kõngas* is first attested in an 18th century Estonian-German dictionary, published as a part of Estonian Grammar by Anton Thor Helle (1732). In his dictionary, there is a compound recorded, consisting of the stems *mägi*, GEN *mäe* ‘mountain, hill’ and *künk*:

mäe=künk der Hügel [‘hill’] (Thor Helle 1732: 136).

The next dictionary attestation is in 1780, in August Wilhelm Hupel’s Estonian-German dictionary:

kenk, G. *kengo*, Hügel. d. (Hupel 1780: 178)

künk, o, (*mäe künk*) der Hügel, r. (p. 193)

In Hupel's dictionary, too, the phonetic shape of the words is a little bit different from that in modern Estonian. Besides the entry words and their German equivalents, some grammatical information (the genitive forms) as well as data about dialectal distribution are given (d. is for *dörptsche Dialekt* (Ger. Dorpat = Est. Tartu), i.e., South-Estonian dialects, r. for *revalsche Dialekt* (Ger. Reval = Est. Tallinn), i.e., North-Estonian dialects). In the second, revised edition of Hupel's dictionary, a variant with different German translation is added: Est. *künkas* – Ger. *kleiner Haufe* ['small heap'] (Hupel 1818: 104).

Ferdinand Johann Wiedemann's Estonian-German dictionary (1869) is the first Estonian dictionary compiled by a linguist. The author's aim was to record the 19th century Estonian vocabulary as completely as possible. Several entries of the dictionary can be regarded as variants of the words *kink* and *küngas*:

kenk G. keingo (d bl) = küngas² (Wiedemann 1869: 290)

kiñk G. kiñgu, kiñgo (d) *Hügel, Hümpel* (p. 318)

känk G. kängu [...] (d) st. kenk (p. 270)

köñgas G. köñka = küngas (p. 400)

köñk, köñklik etc. (D) st. künk etc. (p. 400)

küngas G. künka *Hügel, kleiner Haufen* [example sentences illustrating the (figurative) use of the word] (p. 475)

künge G. künke (pt), künk G. künnga = küngas (p. 476)

Wiedemann's transcription and presentation of grammar are systematic. There are some data about dialectal distribution (d denotes South-Estonian Tartu and Võru dialects, D the island Hiiumaa), or about the field of use (bl. denotes Bible language). There is a slight difference in the German translations of the variants *kink* and *küngas*, however, Ge. *Hügel* is on the first place in both cases, and Ger. *Hümpel* ['heap'] and *kleiner Haufen* ['small heap'] seem to be quite synonymous. Some derivatives are presented in separate entries: Est. *kingukene* (diminutive with suffix *-kene*), Est. *kingune* – Ger. *hügelig* ['hilly'] (with adjective suffix *-ne*) (p. 318), Est. *küngastama* – Ger. *höckerig, hügelig machen od. werden* ['to make or to turn bumpy, hilly'] (with causative suffix *-ta-*, *-ma* is the infinitive marker),

² In Wiedemann's transcription, *ñ* denotes the velar nasal *ŋ*.

Est. *küngastik* – Ger. *hügelige Stelle, Hügelreiche* [‘hilly place, row of hills’] (with collective suffix *-stik*), Est. *künkakene* (diminutive), Est. *künkane* – Ger. *hügelig, höckerig* [‘hilly, bumpy’], Est. *künklane, künklik, künkline, künkrik* id. (with adjective suffixes *-lane, -lik, -line, -rik*) (p. 476). Note that the derivatives are often based on the genitive stems *kingu-* or *künka-*. In the second, revised edition of Wiedemann’s dictionary, no data have been added about the words *kink, küngas* etc. but the presentation of the data has been elaborated. For instance, in the entry *küngas*, additionally all variants are listed:

küngas G. künka (künge, künk, känk, keik, kiik, kõngas, kõik) Hügel, kleiner Haufen [...] (Wiedemann 1893: 432)

In the 20th century, we can follow the words *küngas* and *kink* in the monolingual Estonian dictionaries.

“Eesti õigekeelsuse-sõnaraamat” 1927–1937 (EÕS) is a very thorough normative dictionary of the standard Estonian of 1920s and 1930s. There are entries for both of the words *kink* and *küngas*:

kink *geogr.* (10–25 m kõrge), kingu, -u, -u e. kingusse, -ude, -usid [e. -e], -udesse [e. kingesse]; **kingu|ke|ne**³; **kinguli|ne**³; **kingu|ne**³; **kingust|ik**; **-maa** *geogr.* (Hügelland); **-maastik** (EÕS : 219)

kün|gas² *geogr.* (kuni 10 m kõrge); **-maa** (Hügelland); **-|tama**¹ = künkaliseks tegema; **-t|ik** = küngaste kogu, rida; **-t|uma** = künkaliseks muutuma; **künka|ke|ne**; **künkali|ne**³; **künka|ne**³; **künk|ik** (p. 338)

No actual definitions are given to the words, it is only noted that they both can be used as geographic terms (label *geogr.*); in that case they refer to hills with different height: *kink* is 10–25 m high but *küngas* is up to 10 m. As EÕS is a normative dictionary, it is strongly focussed on grammar: the main inflectional forms are given in the case of *kink* (the declension of this particular word is complicated), in the case of *küngas*, the number after the entry word refers to the pattern word list in the appendices of the dictionary. The entries include derivatives, partly provided with brief definitions. Compared with Wiedemann’s dictionary, the derivatives *kinguli|ne* ‘hilly’, *kingust|ik* ‘hilly landscape’, *küngast|uma*

‘to turn out hilly’ (with reflexive suffix *-u-*), *künkali|ne* ‘hilly’ have been added but *künklane*, *künkline*, *künkrik* have been omitted. In derivatives, the boundary of the last derivative suffix is marked. Also some compounds with respective initial component are presented (*kinkmaa*, *kinkmaastik*, *küngasmaa* [‘hilly landscape’, *maa* ‘land’, *maastik* ‘landscape’]), two of them labelled as geographic terms and probably for that reason provided with their German equivalents.

The entries of the normative dictionaries, published in the second half of the 20th century, usually include only detailed information on pronunciation and grammar. Derivatives and compounds occur alphabetically in the general entry list, i.e., they are put together only if the alphabetical order allows it. E.g., in ÕS 1976, the data is organized in the following way:

kinguke[ne], -se ²⁴; **kinguline**, -se ²⁴ [maastik]; **kingusti`k**, -tiku, -ti`kku ⁸²
k`ink, kingu ⁶⁸
kin`k/kannike bot. (*Viola collina*); ~ **-paju`lill** bot. (*Epilobium collinum*) (ÕS 1976: 266)
küngas kün`ka ³²; ~ **-ti`k**, -tiku, -ti`kku ⁸²
kün`kake[ne], -se ²⁴; **kün`kli`k**, -liku, -li`kku ⁸²; **kün`kli`kkus**, -e ²⁵ (p. 343)

Compared to EÕS, some derivatives have been omitted but the noun *künklikkus* ‘hilly state (of the landscape)’ (with noun suffix *-us*) has been added. The compounds given in EÕS are lacking but two new compound plant names, *kinkkannike* and *kinkpajulill*, with the initial component *kink-* occur (second components *kannike* ‘violet’, *paju* ‘willow’, *lill* ‘flower’).

The Estonian Dialect Dictionary (EMS) is a vast collection of Estonian dialect vocabulary mainly from the first part of the 20th century. Approximately half of the dictionary is published till 2018. According to expectations, this dictionary contains quite a large number of entries that can be regarded as (irregular) variants of the words *kink* and *küngas* (predictable variants, like *kink* and *kenk*, are put together in the same entry):

kingas² *küngas kingaste peal* Kul³ (EMS III: 162)

³ The abbreviations refer to the subdialects and dialects, in which the words, phonetic variants, example sentences etc. have been recorded.

kink *kink* g *king*|u Muh Tor/-*n*-/ Hää Saa K I(g -o Kod) M V(-*n*-Har; g -o Plv Vas Se),
'*king*|u Lüg Jõh IisR, -o Jõh, '*kiŋŋu* Kuu; *kenk* g *kengu* Rid/-*ä*-/ Mar Kul T(-*n*-); '*kinku*,
-o g '*kingu* Vai kõrgendik '*künkäs on* '*suuremb kui kink* IisR [example sentences and
references] (EMS III: 164)

kinks *kinks* g *kingsu* kink, kungas – Sim (EMS III: 166)

köndäss *köndäss* g '*köntä* kõrgem koht, kungas [...]Trv **Vrd** *köngas* (EMS IV: 607)

kõnga '*kõnga* kõrgendik [...] VNg **Vrd** *köngas* (EMS IV: 607)

kõngas¹ *kõngas* g '*kõnka* Mär Ris JMd Jjn Pee; *kõngäss* Hel Kam, '*kõnkä* Trv Ote/-*n*-/
'*kõŋŋas* Kuu; *kõngas* g '*kõnka* Var Mih kungas [example sentences and references] (EMS
IV: 607)

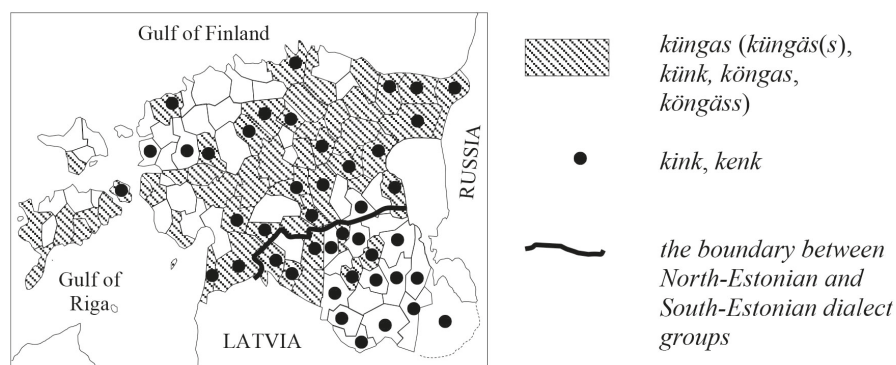
küngas *küngas* g '*künka* VNg/n '*küŋŋas*/ spor Sa(*küŋŋas* VII), Muh Emm LäEd spor Pä,
Ris Juu Kos Amb Tür Koe spor ViK I, Plt Pil; *küngäs* Mar Vig Tõs Juu Kod Kjn Kõp Vil,
küngäss Trv Hls Krk Puh/n -*n*-/ Ote(n -*n*-), '*küngäs* Kuu RId(' *künges* g '*künke* Jõh; pl
'*küngäd* Vai), g '*künkä* (väike) kõrgendik [example sentences and references] (EMS IV: 703)

künk¹ *künk* Põi Hls, g *küng*|u Ans Khk(g *kü|nga*, -*ŋŋa*) Kaa(g -*a*) VII Muh Tõs, -*ä* Khn(n
küng), '*künka* Kse; g *künga* Rõu

1. kõrgendik, kungas [example sentences and references]

2. kühm, küür [example sentences] (EMS IV: 704)

The dictionary includes detailed information about the distribution of words and their variants in subdialects (historical parishes), as well as about their phonetic and grammatical variation. The most common variants are *kink* (*kenk*, *kinku*, *kenko*), *kõngas* (*kõngäss*, *kõnkä*, *kõngas*), *küngas* (*küngäs*, *küngäss*), and *künk*. The distribution of variants, according to the data of the Estonian Dialect Dictionary (EMS) and Archive of Estonian Dialects and Finno-Ugric Languages (EMSUKA), is presented in Map 1.



Map 1. *kungas* and *kink* in Estonian dialects

Each entry contains the definition of the entry word. The word *kink* is defined as ‘elevation’ (Est. *kõrgendik*), while the definition of the word *kungas* is ‘(small) elevation’ (Est. (*väike*) *kõrgendik*). The other variants are generally defined using the same word or the words *kungas* and/or *kink* themselves. The definition of the word *kõndäss* is ‘higher place, hill’. The only word with two definitions is *künk*: 1. ‘elevation, hill’, 2. ‘hump, hunch’. In each entry, a large number of example sentences are presented, provided with abbreviations of parishes in which they have been recorded. Figurative meanings are brought out in the section of example sentences. Most entries end with references to the words having certain similarities.

In addition to the stem words, there are plenty of derivatives of the words *kink*, *kungas* and their variants in the Estonian Dialect Dictionary, presented in separate entries, e.g., *kingukas* 1. ‘hilly’, 2. ‘hill’, *kinguke* (deminutive), *kinguline*, *kingune*, *kinklikanõ*, *kinkline* ‘hilly’ (EMS III: 164–166), *künganõ*, *küngiline*, *küngäslin*e, *künkalin*e, *künkane*, *künkligone*, *künklik*, *künklikane*, *künkline*, *künkälik* id., *küngastik* ‘group of hills’(EMS IV: 703–705). The number of compounds is much less, cf. *kingumets* ‘forest on the hill’, *kingupealne* ‘higher place, hilltop’ (EMS III: 164), *künkapealne* id., *künkasusi* ‘snake (euphemistically)’, literally ‘hill wolf’ (EMS IV: 704).

The Explanatory Dictionary of Estonian (EKSS) is a large collection of the vocabulary of the 20th century literary Estonian (about 150 000 entry words). The entries of the words *kink* and *küngas* are the following:

kink ‹kingu 2› s. väike kõrgendik; GEOGR ümar keskmise kõrgusega (10–25 m) küngas. *Kõrge, madal kink. Metsaga kaetud kingud.* [+ other example sentences.]

Ls. liiva-, moreen-, mäe-, savikink vrd häbemekink. (EKSS 2: 273)

küngas ‹künka 19› s.

1. mäest väiksem kõrgendik. *Künka jalam, nõlv, külg, tipp, hari. Madal küngas. Metsaga kaetud künkad.* [Example sentences.] || GEOGR ümara v. ovaalse põhikujuga ja laugete nõlvadega kõrgendik, mille suhteline kõrgus on alla 200 m. Ls. kalju-, kruusa-, liiva-, mäe-, saviküngas.

2. mulla-, kivi- vm. hunnik. [...]|| hauaküngas. [...] Ls. kalmu-, mullaküngas. (EKSS 2: 755–756)

The dictionary is focussed on semantics and lexical use of the words, the entries contain detailed definitions and numerous example sentences. The word *kink* is defined as ‘small elevation’; as geographic term, it is ‘round medium high (10–25 m) hill’. At the end of the entry, compounds containing the word *kink* are listed: *liivakink* ‘sand hill’, *moreenkink* ‘moraine hill’, *mäekink* ‘hillock’, *savikink* ‘clay hill’, *häbemekink* ‘mons pubis’ (*häbe*, GEN *häbeme* ‘vulva, pudendum’). The first definition (1.) of the word *küngas* is ‘elevation smaller than a mountain’, in geography, it is ‘elevation with round or oval form and gently sloping hillsides, with relative height under 200 m’. The compounds containing the word *küngas* in the first meaning, are *kaljuküngas* ‘rocky hill, rock’ (*kalju* ‘rock’), *kruusaküngas* ‘gravel hill’, *liivaküngas* ‘sand hill’, *mäeküngas* ‘hillock’, *saviküngas* ‘clay hill’. The second definition (2.) is ‘heap of earth, stones etc.’, a special shade of meaning, ‘grave, grave mound’ (Est. *hauaküngas*) is brought out. The respective compounds are *kalmuküngas* ‘grave mound’ and *mullaküngas* ‘mound’ (*muld*, GEN *mulla* ‘earth, soil’).

Derivatives of the respective stems as well as compounds with the respective initial components are presented in separate entries. There are derivatives *kinguke(ne)*, *kinguline*, *kingustik* (EKSS 2: 273), *küngastik*, *künkake(ne)*, *künklik* (756), described

already above, and compounds *kingunõlv* ‘hill slope, hillside’ (273), *küngaslaskumine* ‘mogul skiing’ (*laskumine* ‘descent’), *küngasmaa*, *küngasmaastik* (see above), *küngastevaheline* ‘sth. between the hills’, *künkahari* ‘crest of the hill’, *künkakühm* ‘hillock’ (*kühm* ‘knob, hump, mound’), *künkanõlv* ‘hill slope, hillside’, *künkapealne* (see above) (756).

ÕS 2013 is the latest edition of the normative dictionary of Estonian. It is interesting to see, how the structure of the dictionaries has changed during the time. The entries are not as scarce as they were in the normative dictionary ÕS 1976:

k`ink <22e: kingu, k`inku> väike kõrgendik, küngas. Kalda _ , mäe _ , liiva _ kink. Häbeme _ kink ANAT. Kingu _ nõlv. BOT: kink _ kannike, _ -pajulill (ÕS 2013: 336)

küngas <7: k`ünka, küngast> ka GEOGR kuni 200 m kõrgendik. Künka jalam, nõlv, hari. Haua _ = kalmu _ küngas (441)

Besides the grammatical information short definitions of the entry words are given. A new solution is that the entries include both the compounds in which the entry word is the final component, and these ones in which it is the initial component (cf., e.g., *kaldakink* ‘shore slope’, *mäekink* – *kingunõlv*). The derivatives *kingustik* (336), *küngastik*, *künklik* (441) and the compound *küngaslaskumine* (ibid.) have the entries of their own.

Mägi

The word *mägi* (GEN *mäe*) has equivalents in all Finnic languages: Finnish, Izhorian and Karelian *mäki*, Karelian and Vepsian *mägi*, Votic *mätši*, Livonian *mäg* (pl. *mägūd*). The Proto-Finnic stem is reconstructed **mäki* (GEN **mäyen*). The stem is considered to be of Finno-Ugric origin (< Proto-Finno-Ugric **mäke*), the only equivalents in more distant cognate languages are East Khanty *miy*, *miw* ‘hill’, *müy* ‘small hill, clod’ (SKES: 358; EEW 1610; UEW 266; SSA 2: 191; EES 294).

The word *mägi* occurs already in the 17th century German-Estonian dictionaries, published together with Estonian Grammars (Stahl 1637, Gutsclaff 1648, Göseken 1660). The dictionaries by Stahl and Göseken reflect North-Estonian dialects,

Gutslaff's dictionary reflects South-Estonian dialects. The entries in these dictionaries are rather brief:

Berg/ megki /mehjest (Stahl 1637: 41)

Berg meggi (Gutslaff 1648, no pagination)

Berg/ meggi/ mehjest [...] (Göseken 1660: 132)

In all three dictionaries, Est. *mägi* is the equivalent of Ger. *Berg*. (Note that the Estonian words are written in a way that is considerably different from the modern orthography.) Besides the nominative sg *megki* ~ *meggi*, the entries of Stahl's and Göseken's dictionaries include the elative sg *mehjest*, interpreted by the authors of the 17th century as genitive. Dictionaries by Stahl (1637: 128) and by Göseken (1660: 464) have presented the compound Est. *Wihnamegki* ~ *wihna meggi* – Ger. *Weinberg* ['vineyard'] (Est. *viin*, GEN *viina*, historically 'wine'⁴). This is a translation loan used in the Bible, since there have been no vineyards in Estonia. Additionally, Göseken has recorded two compounds denoting parts of the hill: *mehie harri* (p. 388) or *Meggi Harjas* (p. 501) 'peak', [Est. *hari*, *harjas* 'top, crest, ridge'], and the derivative *meggelick* (p. 272) 'mountainous' [Est. *mägi* + adjective suffix *-lik*]. In addition, two postpositional phrases are presented as separate entries (p. 132): *mehie üllespitte* – Ger. *Berg auff oder an* ['uphill'] and *mehie allaspitte* – Ger. *Berg unterwerts* ['downhill'].

In the 18th century, the word is attested in Anton Thor Helle's Estonian-German dictionary. Again, the German translation equivalent is *Berg*. In addition, some inflectional forms⁵ of the word *mägi* occur as separate entries (Thor Helle 1732: 136):

mäggi der Berg

mäel am Lande. ['on land', (adessive) = the GEN stem *mäe* + suffix *-l*]

mäele auf den Berg hinauf ['up the mountain/hill', (allative) with suffix *-le*]

ma taotan mäele ich ziele nach dem vesten Lande. ['I try to get to dry land']

⁴ The meaning has changed, in Modern Estonian *viin* means 'vodka' and a younger loanword *vein* (< Ger. *Wein*) is 'wine'.

⁵ The adessive, allative and ablative forms of the word *mägi* are also used as adverbs in Estonian, see below.

mält vom Berge, vom vesten Lande. ['from the mountain/hill, from dry land', (ablative) with suffix *lt*]

mäkke aufm Berg. ['up the mountain/hill', (illative)]

The German translations of these forms indicate that the word was used to denote higher places in general sense, not only hills opposed to lowlands or swamps, but also dry land opposed to the sea.

Thor Helle has also presented the derivative *mäggine* ['mountainous, hilly', with adjective suffix *-ne*] (ibid.), and compounds Est. *mäe-künk* (see above), *kiwwi mäggi* – Ger. *der Steinbruch* (p. 115) ['stone pit', Est. *kivi* 'stone, rock'], Est. *winamäggi* – Ger. *der Weinberg* (p. 209) ['vineyard'].

In the Estonian-German dictionary by August Wilhelm Hupel (1780), the entry *mägi* looks like this:

mäggi G mäe der Berg r. d. katkend mäggi ein abgefallener Berg. r. alla mägge berg ab. d. (Hupel 1780: 212)

The German equivalent is the same as in former dictionaries. The correct genitive form *mäe* is given, and it is claimed that the word occurs in both main dialects. The entry includes two illustrative word phrases: *katkend mäggi* 'steep mountain', *alla mägge* 'downhill'.

There are separate entries for the same forms *mäel*, *mäele* that in the dictionary by Thor Helle, and there are entries for some postpositional phrases:

mäe pääl, oder mäe wasta, oder wasta mägge berg an. d. ['on the mountain/hill, uphill']
mäest alla berg ab. r. d. ['downhill'] (p. 211–212)

Some compounds with the initial genitive component *mäe* are given: Est. *mäe künk*, *mäe harri* (see above), Est. *mäe jalg* – Ger. *der Fuß des Bergs* ['foot of the mountain/ hill', Est. *jalg* 'foot'], Est. *mäe rind* – Ger. *mitten am Berge* ['hillside, slope', Est. *rind* 'breast, chest; extending part'], and there is also the adjectival derivative *mäggine* (see above) (p. 211–212). Several compounds with the second component *mägi* can be found in the other entries of the dictionary: Est. *kallas mäggi* – Ger. *ein jäher Berg* ['steep mountain/hill', Est. *kallas* 'shore']

(171), Est. *kiwwi mäggi* – Ger. *ein Fels; der Steinbruch bey Reval* [‘rock; stone pit near Reval (= Tallinn)’] (183), Est. *pühhä mäggi* – Ger. *der Kirchhof* [‘cemetery (around the church)’], Est. *püha* ‘holy’] (249), Est. *torni mäggi* – Ger. *der Berg auf welchem die Feuerbake steht* [‘lighthouse hill’, Est. *torn* ‘tower’] (287), Est. *wina mäggi* (see above) (313).

In Ferdinand Johann Wiedemann’s Estonian-German dictionary (1869), there is the following entry for the word *mägi*:

mägi G. mäe 1) *Berg, Hügel*, mäe all *am Fuss des Berges*, wastu mäge *bergan*, alla mäge *bergab*, Jēzus on mulle süü abi-mägi *Jesus ist meine grosse Hülfe*, ēst-m. *Vorgebirge*, häbeduze-m. *Venushügel*, kāpa-mäed *alte, heidnische Grabhügel*, kiwi-mägi *Berg mit einem Steinbruch, Fels*, kulla-m., kulla-waranduze-m. *Goldbergwerk*, Māija-m. *heiliger Hügel, Opferhügel*, pāe-m. = kiwi-m., rōmu-m. = häbeduze-m., tofni-m. *Berg, auf welchem ein Leuchtthurm steht*, tule-m. *Anhöhe, wo früher Hexen sollen verbrannt worden sein*, wīna-m. *Weinberg*; — 2) *das Obere, das Land* (im Gegensatz vom Meere), *der Bauerhof* (im Gegensatz zur Lostreiber- od. Badstüberstelle), mäe-tuba *Oberstube*, mäe pōle *nach oben*, mäe pōl *oberhalb*, mäe-vald *die landeinwärts wohnenden Bauern* (im Gegensatz zu Strandbauern, ranna-wald), pädid mäele *wedama die Böte an’s Land ziehen*; — adverb. mäel *oben*, mäele *hinauf*, mäelt *herab*, auch als Postpos., wie lāda mäel (W) *auf d. Jahrmarkt* (= peal). (Wiedemann 1869: 646)

Wiedemann is the first who describes the semantics of the word *mägi* more thoroughly. He brings out two definitions: 1) ‘mountain, hill’, 2) ‘higher place, land (opposed to the sea); farmhouse (opposed to cottagers’ houses)’, and he illustrates these definitions with postpositional phrases (*mäe all* ‘at the foot of the hill/mountain’, *wastu mäge* ‘uphill’, *alla mäge* ‘downhill’, *mäe pōle* ‘upwards’, *mäe pōl* ‘up’), compounds (e.g., *kāpa-mäed* ‘old hethen grave mounds’ (*kääbas*, GEN *kääpa* ‘grave mound’), *kulla-mägi* ‘gold mine’ (*kuld*, GEN *kulla* ‘gold’), *tule-mägi* ‘hill, where it is said the witches were burnt earlier’ (*tuli*, GEN *tule* ‘fire’), *mäe-tuba* ‘upper house’ (i.e., house on the hill), and example sentences. He treats the inflectional forms *mäel*, *mäele*, *mäelt* as adverbs and postpositions.

Besides the entry *mägi*, there are entries for derivatives, built on the basis of the stem forms *mägi*, *mäe* or *mäge*: *mägi-line*, *mägi-ne*, *mäe-line*, *mäe-ne* ‘mountainous, hilly’, *mägi-stik*, *mäge-dik*, *mäge-stik* ‘(group of) mountains, hills’,

mäe-kene (diminutive), *mäe-mine* ‘upper, higher’ (pp. 645–646). Some compounds with the component *mägi* are presented in other entries of the dictionary, e.g., *linnuse-mägi* ‘hill with a stronghold’ (p. 556), *liug-mägi*, *liuu-mägi* ‘slide, snow slope’ (*liug*, GEN *liu* ‘slide, glide’) (p. 560), *tõmi-mägi* ‘cathedral hill’ (p. 1300).

Wiedemann’s treatment makes it clear that the meaning ‘mountain’ is only one aspect of the broad semantics of the Estonian word *mägi* – actually it denotes many kinds of higher places. On the ground of the data added in the second edition of Wiedemann’s dictionary, we can see that the word has the meaning shade ‘heap’, too: there is the compound Est. *pühkme-mägi* – Ger. *Kehrichthaufen* [‘rubbish heap’] (Wiedemann 1973 (1893): 583).

The entry *mägi* in the normative dictionary of 1920s’ and 1930s’ (EÕS) is long, more than two pages:

mägi *geogr.* (üle 50 m kõrg: Berg, mount, mont), *mäe*, *mäge*, *mäkke* e. *mäesse*, *mägede*, *mägesid*, *mägedesse*; **mäeahel** = **mäeahelik**; **mäeakadeemia** (ülikool) [+ other compounds and derivatives] **mäkketõusmine** (Bergsteigen) (EÕS: 546–548)

It is noted that the word can be used as a geographic term: in this case, *mägi* is more than 50 m high and its equivalents in German, English and French are respectively *Berg*, *mount*, *mont*. Important inflectional forms of the word are given; a large amount of derivatives and compounds (with different stem forms of the word *mägi* as the initial component) is listed. The derivatives are *mäeline*, *mäene*, *mäGINE* (see above), *mäe-stik*, *mägi-kond* ‘mountains’, *mägi-lane* ‘mountaineer’, *mägi-line* ‘mountainous, hilly’, *mägi-mine* ‘upper, higher’. Many compounds are terms of geography, geology, mining, botany, zoology etc., thus they are of no importance in the context of the words for ‘hill’.

In the normative dictionary ÕS 1976, there are altogether 44 compounds and derivatives with the initial component *mägi* and 49 with the initial component *mäe*, grouped into three entries according to the alphabetic order (in addition, the irregular illative form *mäkke* together with the compound *mäkketõus* ‘climbing a mountain/hill’ has its own entry):

m`äe/aheli`k *geogr.*; **-hari**; **-insener** [...] **mäe`sti`k**, **-tiku**, **-tikku** ⁸²

m` äe/suusataja *sport*; ~**suusatamine** *sport*; [...] ~**v`eer** [-veeru]

mägi, m`äe ³²; ~`**aas**; ~**a`ster** *bot.* alpi aster (*Aster alpinus*) [...] ~**vaher** *bot.* (*Acer pseudoplatanus*) (ÕS 1976: 440)

As mentioned above, the focus of this dictionary is on grammar. Terms of different fields make large part of the compounds. They are marked with special labels and provided with short definitions and/or Latin equivalents (plant and animal names). There is no reason to describe them more thoroughly here.

In the Estonian Dialect Dictionary (EMS), the entry *mägi* is the following:

mägi *mägi* g *mäe*, *mää* üld(g *mägi* Vän Hää); p *mäke* (-k-) Võn Kam Ote Rõn(*mäkke*) V; pl ` *mäeda* Trv, gpl *mägide* Kod

1. kõrgendik *mäest* `alle on `ninda `kerge `tulla *kõhe* Lüg [+ other example sentences] || suur kogus, hunnik *terve mägi kiva* Trv [...]

2. piltl (soodsast, kindlast seisundist) [example sentences] (EMS VI: 311–312)

The entry starts with information about dialectal distribution of the word, and about its phonetic and grammatical variation. The word is known in all Estonian dialects and subdialects (label *üld* ‘common’). There is no variation in nominative sg, but in genitive sg, the variants *mäe* and *mää* occur in parallel. Some dialectal forms of oblique cases, different from the common language, are given, too. The word is defined simply as ‘elevation’ but the shade of meaning ‘large amount, heap’ is brought out as well. Figurative use (label *piltl*) about beneficial, firm situation is explained and illustrated with example sentences in a separate paragraph (2.).

The forms of external local cases *mäel*, *mäele*, *mäelt*, used in special meanings as adverbs or postpositions (similarly to Wiedemann’s interpretation), are presented in separate entries in EMS.

There are three entries for each form, according to their meanings. The words *mäel*¹, *mäele*¹, and *mäelt*¹ are related to the location of the farmhouse (dwelling-house was always built in a higher place): *mäel*¹ ‘by the farmhouse’, *mäele*¹ ‘to the farmhouse’, *mäelt*¹ ‘from the farmhouse’ (EMS VI: 309). The data of dialectal distribution shows that these meanings are used mainly in the South-Estonian dialect group. The words *mäel*², *mäele*², and *mäelt*² are related to the (sea)shore:

mäel² ‘ashore’, *mäele²* ‘ashore, on the shore, to the shore’, *mäelt²* ‘from the shore’ (ibid.). These words are used in this sense in the North-Estonian dialect group, near the sea or the lakes. The words *mäel³* ‘up’, *mäele³* ‘up(wards)’, and *mäelt³* ‘from above’, with general adverbial meaning, are used only in the Võru dialect, spoken in the South-Eastern Estonia.

The following derivatives of the stem *mägi* (*mäe-*, *mäge-*, *mäi-*) are recorded in EMS: *mäe-jane*, *mäe-line*, *mäe-ne*, *mäge-line*, *mäge-ne*, *mägi-likku*, *mägi-line*, *mägi-ne*, *mägi-s-line*, *mägi-stik*, *mägi-stiku-line*, *mägi-stiku-nõ* (EMS VI: 309–312), *mäi-ne* (p. 317) ‘hilly’, *mäe-kas* ‘sloping, tilted’, *mäe-mine*, *mäe-mäne* ‘upper, higher’, *mäe-stik* ‘hilly place’, *mäge-lik* ‘hilly; row of hills/mountains’, *mäge-stik* ‘hills, mountains; hilly, mountainous’ (p. 309–311). The derivatives *mäel-mine*, *mäel-mäne* ‘upper, higher’ seem to be built from the adessive form *mäel* (ibid.) The number of compounds with the initial component *mäe-* is not very big, there are *mäealune* ‘situated at the foot’ (*alune* ‘under-’), *mäekont* ‘hill, hillock’ (*kont* dial. ‘hill’), *mäeots*, *mäepool¹* ‘top, upside; place where honourable persons were seated at the table’ (*ots* ‘end, top’, *pool* (noun) ‘side’), *mäepool²* ‘up’ (*pool* (adverb, postposition) ‘at, by, towards’), *mäepoolt* ‘from above’ (*poolt* ‘from’), *mäetuul* ‘west wind’ (probably ‘off-shore wind’) (p. 308–310). Thus the dialectal derivatives and compounds bring out the meaning shade ‘upside, top’ of the word *mägi*.

In the Explanatory Dictionary of Estonian (EKSS 2009), the use and semantics of the word *mägi* are also described thoroughly:

mägi <mäe, mäge 28> s.

1. GEOGR hrl. ümara v. ovaalse põhijoonisega kõrgendik, mille suhteline kõrgus on üle 200 m (Eestis ka kõrgendiku kohta, mille suhteline kõrgus on üle 50 m); (üldkeeles:) igasugune ümbritsevast alast kõrgem pinnamoodustis. *Meie mäed on künkad Kaukaasia mägede kõrval. Mägede hambulised harjad.* [+ other example sentences.] || hunnik, kuhjatis, suur kogus. [+ examples]

Ls. aheraine-, hiie-, hüppe-, jää-, kalju-, kantsi-, kelgu-, kiige-, kiriku-, kuppel-, kõrg-, laine-, linna-, liu-, lossi-, lume-, ohvri-, prügi-, pudru-, suusahüppe-, suusa-, tehis-, tuha-, tule-, viina-, võlla-, väljamägi.

2. (väliskohakäänetes) **MURD a.** talu (vastandina popsimajale); elumaja (vastandina saunale, laudale vm.). [examples] **b.** rand. [examples]

3. (kohakäänetes) PILTL (majanduslikult) soodus, kindel seisund. [examples]

mägede taga kaugel. [examples]

mägesid (paigast) liigutama ~ nihutama ~ tõstma midagi usumatult, üliinimlikult suurt korda saatma. [...] (EKSS 3: 542–543)

The first definition (1.) says that as geographic term, *mägi* is ‘usually an elevation with round or oval ground plan, with relative height over 200 m (in Estonia also about an elevation with relative height over 50 m); in common language, it is ‘any formation of relief, higher than the surrounding area’. After the symbol ||, the special shade of meaning ‘heap, accumulation, large amount’ is given. After the example sentences, compound words with the second component *mägi* are listed, e.g. *hüppemägi* ‘jumping hill’ (*hüpe*, GEN *hüppe* ‘jump’), *jäämägi* ‘iceberg’ (*jää* ‘ice’), *kaljumägi* ‘rocky mountain’ (*kalju* ‘rock’), *kelgumägi* ‘sledging slope’ (*kelk*, GEN *kelgu* ‘sledge’), *kõrgmägi* ‘high mountain’ (*kõrge* ‘high’), *linnamägi* ‘hill with a stronghold’, *prügimägi* ‘rubbish heap’, *pudrumägi* ‘large portion of porridge’, literally ‘porridge heap’ (*puder*, GEN *podru* ‘porridge’), *tuhamägi* ‘ash hill (refuse of oil shale processing)’ (*tuhk*, GEN *tuha* ‘ashes’), *tulemägi* ‘volcano’ (*tuli*, GEN *tule* ‘fire’), etc. The second meaning (2.) is labelled as dialectal (MURD) and it is claimed that this concerns only the forms of the external local cases (i.e., the allative, adessive, and ablative). The second meaning is divided into two subdefinitions: a. farmhouse (opposed to the cottager’s house); dwelling house (opposed to the sauna, to the cattleshed etc.); b. coast. The third, figurative meaning (3.) ‘(economically) beneficial, firm situation’ concerns the forms of the local cases (i.e., the illative, inessive, elative, allative, adessive, and ablative). The entry ends with two idiomatic phrases: *mägede taga* ‘far away’ (literally ‘behind the mountains/hills’), *mägesid (paigast) liigutama ~ nihutama ~ tõstma* ‘to achieve sth. incredibly great’ (literally ‘to move the mountains’).

More than one hundred compounds with initial components *mägi-* or *mäe-* are presented in EKSS, including a plenty of special terms (EKSS 3: 541–544). There is no need to treat them here. The number of derivatives is six: *mäe-ndus* ‘mining industry’, *mäestik*, *mägestik*, *mägilane*, *mägine* (see above), *mägi-s-us* ‘mountainous state’ (ibid.).

The normative dictionary *ÕS 2013* gives a concentrated overview about the use of the word *mägi*:

mägi <2i: m`äe, mäge, m`äkke ja m`äesse>. Käis mägedes matkamas. Mäkke ronimine, tõusmine, mäest (alla) laskumine. Elu läheb mäkke *elu edeneb*. Viljalõikusega saadi varakult mäele (*valmis, toime*). On omadega mäel *on soodsas, kindlas seisundis*. Üles+mäge ja alla+mäge *ka* ÜLEK. Mägede taga ÜLEK *kaugel*. Suudab mägesid (paigast) liigutada v nihutada v tõsta ÜLEK (*midagi uskumatult suurt korda saata*). Jää _ , tuha _ , tule _ *vulkaan*, tehis _ mägi. Hiie _ , hüppe _ , kelgu _ , kiige _ , linna _ , liu _ , prügi _ , viina _ , võlla _ mägi. Mäe _ jalam, _ kallak, _ külg, _ nõlv = _ nõlvak = _ veer <-veeru>, _ sein, _ hari, _ selg = _ seljak *lauge mäe hari*, _ tipp. Mäe _ insener, _ meister, _ tööline. MÄEND: mäe _ järelevalve, _ kombain, _ masin. Mägi _ karjamaa, _ karjus, _ kindlus, _ küla, _ maastik, _ rada, _ rahvas *mägilarahvas*. Mägi _ mäestiku-: _ jõgi, _ järv, _ kuurort, _ taim. ZOOL: mägi _ kits, _ lammas, _ mesilane. BOT: mägi+mänd <-männi>, _ nulg, _ palm (*toataim*), _ ristik, _ sibul, _ tarn, _ vaher. Mäkke _ tõus (*ÕS 2013: 569*).

In addition to the grammatical information, there are examples about figurative use and idioms, as well as the list of compounds with the final component *-mägi* or initial components *mäe-*, *mägi-* in the entry. 18 compounds with the initial component *mäe-* and 11 with *mägi-* have the entries of their own (pp. 568–569). The dictionary includes derivatives *mäendus*, *mäestik*, *mägilane*, *mägine*.

Põnt (põndak) and põnk

The origin of the words *põnt* (GEN *põnda*) together with its derivative *põndak* (*põnda-k*), and *põnk* (GEN *põnga*) is unknown. The etymological relationships of the words are difficult to define. It has been speculated that these two stem words might originate from the same root. According to the semantic aspect and the distribution of the dialect words (see below), it seems to be possible, but the shift $k > t$ or $t > k$ is not regular in Estonian. Some theories of the words' origin have been set but nothing proved acceptable (see EEW 2286–2287; EES 400).

The words do not occur in dictionaries before the 19th century. In the first edition of Wiedemann's dictionary, there is the word *põnk* only:

põnk *G. põnga Hügel, Erdhaufen, Erdklumpen.* (Wiedemann 1869: 955)

The German definition says that *põnk* is ‘hill, heap of earth, lump of soil’. Also, an obvious derivative Est. *põnklik* – Ger. *klumpig, klössig* [‘lumpy, cloddy’] is recorded, with adjective suffix *-lik* (ibid.).

In the second edition of the dictionary (published in 1893), the word *põnt* and its obvious derivatives *põnder*, *põndrik* have been added:

põnt G. *põnda* (S) *trockene, höhere Stelle auf Wiesen*. (Wiedemann 1973 (1893): 866)

põnder G. *põndri* (*põndrik*) 1) [...] 2) *fig. Knollen, Erhöhung*.

põndrik G. *põndriku* (NW) = *põnder* (p. 865)

The word *põnt* is defined as ‘dry, high place in the meadow’, the derivatives *põnder*, *põndrik* are both explained as ‘knob, elevation’. To the word *põnk*, Ger. definition *Knoten im Garn (beim Spinnen)* [‘knot in yarn (by spinning)’] is added (p. 866).

In EÕS, the entries *põnk* and *põnt* are the following:

põnk (= *küngas*; *jomp*, *tombuke*, *jork* (*lõngas*); *geogr.* Anhöhe; *anat.* Knorren), *põnga*, -a, -a e. *põngasse*, -ade, -asid e. -u, -adesse e. *põngusse*; **põngali|ne³** *ka anat.* (knorrig);

põnga|pealne; **põnga|taoline** = -|jas; -|ik

põnt (= *kõrge kuiv koht põllul, aasal*), *põnda*, -a, -a e. *põndasse*, -ade, -asid e. -u, -adesse e. *põndusse*; **põnda|k³** = *väike põnt*; **põnda|pealne**; **põnda|taoline** = -|jas; -|ik (EÕS: 909)

The word *põnk* is briefly defined as ‘hill; burl, knotty part in yarn’. German equivalents are given to the word in the sense of scientific terms: it is ‘elevation’ in geography but apparently ‘condylus’ in anatomy. The definition of the word *põnt* says that it is ‘high dry place in the field or in the meadow’. Again, the entry includes thorough grammatical information, derivatives (*põnga-line* ‘lumpy’, *põnk-jas* id., etc.) and compounds (*põngapealne*, *põndapealne* ‘higher place, top of hillock’ (*pealne* ‘top, upside’), etc.). It is worth of mentioning that the derivative *põndak* (with noun suffix *-k*), defined as ‘small *põnt*’, occurs in this dictionary first time.

The normative dictionary ÕS 1976 has the entries *põndak*, *põnk*, and *põnt*:

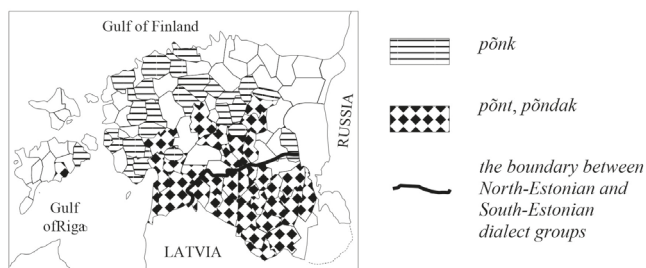
põndak, -u ³ *väike küngas, kõrge kuiv koht aasal v. põllul; ~uline*, -se ²⁴; **põnda pealis** *anat.* (epicondylus); **põnda p`ealne** (ÕS 1976: 556–557)

põn`k, *põnga* ⁶⁴ *põndak*

põn`t, *põnda* ⁶⁴ *põndak*; *ka anat. luu otsa kõrgem osa* (p. 557)

Although words are usually not defined in this dictionary, these entries have short definitions. The meaning of the noun *põndak* is ‘small hill, high dry place in the meadow or in the field’, *põnk* and *põnt* are its synonyms but additionally, the latter has a special meaning in anatomy (cf. EÕS, where the word *põnk* was an anatomic term). The derivative *põndaku-line* [‘hilly; tufty, bumpy’] of the word *põndak* is given. The only compounds are *põndapealis* ‘epicondylus’ (*pealis* ‘top part’) and *põndapealne* (see above).

The last entry word of the published volumes of the Estonian Dialect Dictionary is *nälpsama*, thus no data are available about the words *põnt* and *põnk* yet. Brief data about their dialectal distribution and phonetic variability can be found in the Concise Dialect Dictionary (VMS). Dialectal derivatives, too, can be found there. In general, this dictionary does not include compounds. The word *põnk* has variants *põnks*, *põnksik*, and synonymous derivatives *põngas* (with suffix *-(a)s*) and *põngal* (with suffix *-l*) (VMS: 277). They are known in North-Estonian dialects. The word *põnt* has the variant *põnts* and synonymous derivatives *põnda-k(-as)*, *põnda-s*, *põn(d)sa-ss*, *põntsa-k(-as)*, *põn(d)sa-k*, and *põntsi-k*, common in the South-Estonian dialects (VMS: 276–277). See the dialectal distribution of the stems *põnk-* and *põnt-* on Map 2. The words have many derivatives with adjective suffixes, like *põnga-line*, *põngu-line*, *põnk-lik*, *põnk-line*, *põnk-ne*; *põndaka-ne*, *põndsaku-ne*, *põnt-lik*, *põnt-line*, *põntsaku-lene* ‘hilly; tufty, bumpy’, and with collective noun suffixes, like *põnga-stik*, *põnda-stik* ‘hilly, tufty landscape’ (VMS: 276–277). Two verbs, *põntima* and *põntuma* (VMS: 277) mean ‘to become dry and harden (about earth)’.



Map 2. *põnk* and *põnt* in Estonian dialects

The respective entries in the Explanatory Dictionary of Estonian (EKSS) are the following:

põnk <põnga 23> s. põndak, kungas. [Example sentence.](EKSS 4: 564)

põnt I <põnda 23> s.

1. põndak. [Example sentence.] **Ls.** liivapõnt.

2. ANAT luude otste paksend (*condylus*). [Examples.] (p. 565)

põndak <-u 2> s. väike kungas v. kink, kõrgem pae- v. kruusapõhjaga kuiv koht hrl. heinamaal v. põllul. [Examples.] **Ls.** kruusa-, liiva-, nurme-, nõmme-, söödipõndak. (p. 563)

The derivative *põndak* has the most detailed definition, it is 'small hill, higher place with limestone or gravel bottom, usually in hayland or in the field'. The words *põnk* and *põnt* are defined using the word *põndak* itself (in addition, the word *põnt* has another definition in anatomy). Five compound words are listed with the second component *põndak*: *kruusapõndak* (cf. *kruus* 'gravel'), *liivapõndak* (cf. *liiv* 'sand'), *nurmepõndak* (cf. *nurm* 'meadow, field'), *nõmmepõndak* (cf. *nõmm* 'heath'), *söödipõndak* (cf. *sööt* 'fallow'), but there is only one with the second component *põnt* (*liivapõnt*) and none with *põnk*. Besides this, the derivatives *põndaku-line*, *põnda-s*, *põnda-stik*, *põnk-lik* (see above), and the compounds *põndakupealne* 'higher place, top of hillock' and *põndapealis* (see above) have separate entries (EKSS 4: 563–564).

In the last normative dictionary ÕS 2013, the word *põnk* has been omitted. We can conclude that this word is hardly used in modern common Estonian. Compared to ÕS 1976, the data is organised in slightly different way but there are no remarkable changes in the data itself:

p`õnt <22u: põnda, p`õnta> *põndak*; ANAT *luu otsa paksend*. Põnda _ pealne heinamaa. Põnda _ pealis ANAT (ÕS 2013: 737)

põndak <2: -u> *väike kungas, kõrge kuiv koht aasal v põllul*. Liiva _ põndak (p. 736)

Summary and outlook

The dictionary recordings allow to give a look at the history of the use and semantics of the Estonian words denoting 'hill'. From the six words, analysed in the present paper (*kungas*, *kink*, *mägi*, *põnt*, *põndak*, *põnk*), only the word *mägi*

is attested in each dictionary since the 17th century. Variants of the words *küngas* ~ *kink* have been recorded since the 18th century. The words *põnt*, *põndak*, *põnk* occur in dictionaries only since the second half of the 19th century. One must take into consideration that the chronology of dictionary recordings of these particular words indicates rather to their frequency (i.e., how common they have been), than to their age. Likely, it must be mentioned that first at all, the older dictionaries include the vocabulary of Christian texts.

The word *mägi* has been the most common Estonian word for any higher place in the landscape, used not only for the “real” hills but, for example, also for dry land opposed to the sea. It may denote also ‘heap, accumulation’. In some dialects, forms of this word may denote the direction ‘up’. The use of the same word in the meaning ‘mountain’ obviously started in literary Estonian, in connexion with translating the Bible. In modern Estonian, the word *mägi* is used for both hills and mountains (difference is made only in the scientific terminology, e.g., in geography). The vast field of semantics is proved by the large number of compounds, built by the means of different forms of the word.

The words *küngas* and *kink* are commonly used for ‘hill’ in Estonian, too. Their semantics is narrower than that of the word *mägi*. Besides the meaning ‘hill’, they (especially *küngas*) may denote ‘heap of earth, stones etc.’ (but never ‘mountain’).

The use of the words *põnt* and *põndak* is more restricted. They seem to denote a special type of hills, first of all, dry hillocks in the fields etc. The word *põnk*, having the same meaning, is hardly used in Modern Estonian any more.

Words denoting ‘hill’ in Romanian dictionaries

Ioana Galleron

French-Romanian bilingual dictionaries recommend translating *colline* in Romanian indifferently as *deal*, *colină* [Gorunescu, 2002], sometimes as *colnic* [Haneş, 1981]; Google Translate is more restrictive, since it gives only *deal*. The results are the same when looking at translations from Romanian *deal* in French, constantly rendered by *colline* in the consulted dictionaries. On the contrary, many more equivalents can be found when looking at how to translate the English word ‘hill’ in Romanian (*deal*, *deluşor*, *munte*, *colină*, *înălţime*, *muşuroi*, *grind*, *morman*, *măgură*, *colnic*, *grădişte*, *muncel*, *movilă*), with the following basic definitions¹:

Colină	“Formă de relief mai mică decât dealul; colnic, deluşor.” (Landform lower than a hill; hillock, small hill.)
Colnic	“Colină.” (Hill.)
Deluşor	“Diminutiv al lui deal; deluţ, deluleţ.” (Diminutive of deal; other forms: deluţ, deluleţ.)
Grădişte	“Ridicătură (alungită) de teren formată în lunca unui râu, datorită schimbării către vărsare a meandrelor lui.” (A longitudinal elevation of earth formed by a river towards its flow, because of a change in its meanders.)
Grind:	“Mică ridicătură de teren de formă alungită, care rezultă din depunerile aluvionare ale unei ape curgătoare sau ale mării.” (A small elevation of earth formed by the alluviums of a river or of the sea.)

¹ All definitions follow [DEX 1998]. *Deal* is not given here, as it will be discussed in depth below.

Înălțime	<p>“Punct ridicat deasupra nivelului pământului; p. ext. (la pl.) cer. ♦ Vârf, culme, înălțătură. ”</p> <p>(A position elevated above the ground level; by extension, at plural, the sky. Synonyms: summit, crest, high.)</p>
Măgură	<p>“Deal mare izolat (tăiat de ape); p.ext. munte. ♦ Movilă. ♦ Pădure (situată pe un loc înalt). [Var.: (reg.) măgulă s.f.]”</p> <p>(High hill, isolated (separated by waters); by extension, mountain. Syn. Mound; forest (situated on a high). [Regional variation: <i>măgulă</i> s.f.]”)</p>
Morman	<p>“Îngrămădire de obiecte de același fel; cantitate (mare) dintr-un material strâns la un loc; grămadă, maldăr.”</p> <p>(Accumulation of objects of the same kind; (big) quantity of a same material, put together; heap; pile.)</p>
Movilă	<p>“Ridicătură de pământ naturală, mai mică și mai rotunjită decât dealul, care se află de obicei în regiunile de câmpie sau de podișuri joase.</p> <p>(Natural land elevation, smaller and rounder than a hill, usually situated in plain regions or lower plateaus.)</p>
Muncel	<p>“Munte sau deal mic, care constituie o treaptă mai coborâtă a unui lanț sau a unui masiv muntos, cu structură cutată, alcătuit din roci dure.”</p> <p>(Mountain or small hill, lower part of a mountain chain or massif, with a folded structure, made from hard rocks.)</p>
Munte:	<p>“Ridicătură a scoarței pământului mai mare decât dealul, de obicei stâncoasă și depășind înălțimea de 800 de metri. ”</p> <p>(Elevation of land higher than a hill, usually rocky, and measuring over 800 m.)</p>
Mușuroi	<p>“(Reg). Ridicătură mică de pământ; movilă, deal.”</p> <p>(Small elevation of land; hill.)</p>

On the other hand, the same dictionaries suggest translating *deal* as *hill*, *mount*, *eminence*, *height*, *down*, *elevation*, *ascent* and even *vineyard*.

Obviously, the existence in Romanian of a word phonetically close to the French one obliterates for the authors of French-Romanian dictionaries the differences in the perception of the geographical realities, at least as reflected in the use of the two main words for designating hills in Romanian, *deal* and *colină*. At the same time, in spite of the more numerous possible translations from Romanian to English (and vice-versa), some of the senses of *deal* are lost

in the proposed translations. While these are not wrong as such, they present the drawback of concentrating almost exclusively on *deal* as a landform, leaving aside other elements of representation of a Romanian hill, some of them very specific to this language, build from a Slavic hybridization of Latin.

In order to give an as accurate idea as possible of the particularities of Romanian hills, this paper will start with a more detail investigation of the definition of *deal* in various Romanian dictionaries. After summarizing the initial findings, it will turn shortly to the analysis of *colline* and *collina* in some French and Italian dictionaries, so as to underline the differences, both with *deal* and with *colină*. In the third, much shorter, part, it will get back to the above-quoted variety of Romanian words apt to designate (some sort of) hills, in order to observe their etymologies and semantics; on this basis, it will try to provide an explanation of the differences between the Romanian and the other two Romance languages, briefly explored in the second part.

***Deal* in Romanian dictionaries**

Almost all definitions of ‘hill’ in Romanian dictionaries are organised in two parts, the first one explaining the word as designating a landform, the second one giving an agricultural signification.

To start with this second, the most straightforward (the facts will appear more complicated when looking at etymologies), *deal* means either vineyard (*vie*, *podgorie*), or cultivated field (*ogor*, *teren arabil*). Only [Săineanu, 1929] gives the equivalent of ‘hill’ as forest (*pădure*, *codru*) in the second part of the entry. In other dictionaries, meanings and representations of hills as uncultivated land are associated with the first sense, describing hills as landforms. Examples of use taken from Romanian literature often associate it with forests (“*Dincolo de gard, în toate părțile, dealuri rotunde, cu dumbrăvi pe coamă*. VLAHUȚĂ, O. A. 424”, quoted in [DLRLC, 1955-1957]; “Beyond the fence, in all directions, round hills, with coppices”), or with poor lands (*dealuri aride*, barren hills, is a frequent collocation). One can also note that the plural seems to be used rather when

hills are uncultivated, while the singular will preferably designate a hill covered in vineyards or crops. Interestingly enough, Romanian does not seem to associate hills with orchards.

The first part of the definition poses an interesting problem of representation of this landform. Half of the sources try to provide precise measures, but none gives the same figures, and the height attributed to hills tends to increase over time. In 1929, a hill was “a land elevation under 300 meters” [Săineanu, 1929]; in 1993, it became “a positive landform, with an absolute height conventionally fixed between cca. 200 and 800 m, with slopes dominating the surrounding valleys” [DE, 1993-2009]. In 2009, hills can go up to 1000 meters: “positive landform not too high (under 1000m)” [DEX, 2009].

The other sources remain vague with regards to the height, preferring to provide relative points of comparison:

deál (*ea* dift.) n., pl. *dealuri* (vsl. *děľü*, parte *pre-děľü*, hotar [de aici *Predeal*]. V. **deiniță**). Măgură, colnic, înălțime de pământ mai mică decât muntele.

(**hill** (diphthong *ea*), neutral noun, pl. *dealuri*, (from the slavic *děľü*, prefixed by *pre-* means “border” [hence, *Predeal*]. See **deiniță**). Hillock, glade, elevation of the earth lower than a mountain.) [Scriban, 1939]

DEAL, *dealuri*, s. n. **1**. Formă de relief mai mică decât muntele dar mai mare decât movila. (**DEAL**, *dealuri*, neutral noun. **1**. Landform lower than a mountain but higher than a mound.) [DLRLC, 1955-1957]

DEAL, *dealuri*, s. n. **1**. Formă de relief pozitivă care se prezintă ca o ridicătură a scoarței pământului mai mică decât muntele, dar mai mare decât colina.

(**DEAL**, *dealuri*, neutral noun. **1**. Positive landform with the aspect of a swell of the earth crust, lower than a mountain, but higher than a hillock.) [DEX, 1998]

Another type of definition concentrates solely on the form of the hill (already mentioned in one of the quotations above: “a swell of the earth crust”), and provides no information about the height, be it absolute or relative:

deal (**deáluri**), s. n. – **1**. Colină, formă de vîrf ca o ridicătură de pământ.

(deal, (dealuri), neutral noun. – 1. Hillock, landform with a peak, like an elevation of the earth.) [DER, 1958-1966]²

All these definitions repose on a system of contrasts, between “positive” and “negative” oscillations of the earth crust on the one hand (“positive” and “negative” being mathematically defined³ with regards to a very vague axis zero, formed by the flat land), and between “positive” oscillations themselves, on the other hand.

‘*Hill*’ is defined in opposition with ‘*valley*’, as clearly shown by a definition from a 19th century dictionary. The authors of this dictionary are more preoccupied with the origin of the word, than with its definition, and therefore the larger part of the entry is dedicated to various suppositions as about the etymology of *deal*. However, their text ends with the observation that “the form as well as the meaning [of the word] seem to hide the contrary of valley” [Laurian and al., 1871].

In parallel, ‘*hill*’ is defined by contrast with ‘*mound*’ and a similarity with ‘*mountain*’. It is worthwhile noting the dissymmetry between the two comparants of ‘*hill*’: a hill can be a mountain, but all definitions insist on the fact that it cannot be a mound. The similarity between ‘*hill*’ and ‘*mountain*’ can be also observed through the substitution test, which works in many contexts, including for a folk saying such as “deal cu deal se întâlnește, dar’mite om cu om⁴”: the same saying exists in the form “*munte cu munte se întâlnește*”. Also, mountains are opposed to valleys in certain sayings, confirming the similarity with hills: “*Prin munți și prin văi = peste tot, pretutindeni, pe tot întinsul*.” (“through mountains and valleys = everywhere”, [DEX, 1975]

² Same description in [NODEX, 2002]: “a land elevation lower than a mountain, with a height between 200 and 800 meters”.

³ The same dictionary is one of the few to provide the derivate *deluros* (literally, *hilly*) for which it gives as an equivalent *uneven* (*accidentat*). A hill, in this dictionary, is an irregularity of the earth, an accident on an even surface.

⁴ Literally, “a hill can meet another hill”; the expression is meant to say that the most unexpected encounters between people are not out of the realm of possibilities, since landforms as hills can meet.

Lastly, a series of elements define ‘hill’ by contrast with ‘mountains’. Beyond the height, mountains are defined by their composition: “MUNTE, *munți*, s. m. 1. Ridicatură a scoarței pământului mai mare decât dealul, de obicei stâncoasă și depășind înălțimea de 800 de metri.” (“elevation of land higher than a hill, usually made of rocks, and above 800 meters”, [DEX 1975], my underlinings). Also, they are considered a more complex landform: “*munte*, s.m. [lat. mons, -tem] 1. Forma complexă de relief, cu înălțimi care depășesc în general 800 m.” [Breban, 1997].

Descriptive vocabularies differ also to a certain extent: if both mountains and hills can have *coamă* (crest), hills seem to be the only one to have *lips* (buză), while mountains can have *foreheads* (*frunte*).

More importantly, *deal* in Romanian figures in a series of phrases used to give directions, a function nor *munte* or *colină* can assume. Certain phrases built around *deal* seem non-compositional: “*a merge la deal*” (“going to the hill”) does not necessarily mean going towards a hill; peasants may use it for “going to the fields”, “heading for work towards cultivated lands”. In other cases, *deal* indicates a direction of movement: “*hai la deal*” (“let’s go upward”) means going towards a point situated in front of the speaker, sometimes (but not necessarily) situated on a slope. By opposition, “*hai la munte*” or “*hai la colină*” can only mean moving towards a mountain or a hillock. Also, “*la deal de*” (“uphill from”, if one may say) designates a location beyond a village, town, place, as seen from the point of view of an approaching traveller. This aptitude to figure a direction is also to be found in metaphorical phrases where “deal” is combined with its antonym “vale” (valley), such as

“*dă la deal și dă la vale*” (“tries in every way”, [DLR, 2006]);

“*greu la deal și greu la vale*” (“whatever you do, it’s difficult”, [DLR 2006]);

“*un deal și-o vale și-o fugă de cal mare*” (literally, “a hill, a valley, and a run of a good horse”, meaning “a long distance”, [DLR 2006]);

“*ce mai la deal la vale*” (“to cut a long story short”, literally, “no point in going up hill or down the valley”, [DLR, 2006])

“Hill” and “valley” are, in such phrases, very similar to “up” and “down”, “left and right”, or “forward”, “backward”.

Last, *deal* can convey the idea of a border, a milestone; in this respect, *deal* is close to *munte*, often seen as a frontier, the limit of the known world. This is the case in a toponym such as *Predeal*, quoted in one of the definitions above. Another dictionary mentions the saying “*grăiește cam peste deal*” (“one speaks a bit over the hill”, DLR, 2006), meaning “someone is a bit strange”, “speaks in a curious way”. In a similar order of ideas, a hill is also often assimilated to an obstacle (“*Este-un deal mare-ntre noi*”, “there is a hill between us”, [DLR 2006]), calling for being “flattened” or somehow annihilated in order to achieve something. What exists over the hill appears in both cases as a new world, as another country, with different customs, very much like the land that is to be found “*peste munți*” (“on the other side of the mountains”).

To sum up, a Romanian hill is:

- a swell of the earth crust, of different heights, higher than a hillock but smaller than a mountain;
- a direction;
- a frontier;
- a cultivated land (either with vineyards or cereals).

Deal, colline, collina

To what extent are these senses to be found in other Romance languages? French dictionaries give the following definitions (selection):

COLLINE, subst. fem. Relief de faible hauteur dont la pente est généralement douce. *Les sept collines de Rome. La colline du Golgotha* (P. BOURGET, *Essais de psychol. contemp.*, 1883, p. 34). *Une colline assez raide la seule saillie de ce plateau nivelé (...) se profilait devant nous* (GRACQ, *Le Rivage des Syrtes*, 1951, p. 162). *L'étendue morne de la plaine où il s'est passé quelque chose, le mol soulèvement des collines à l'horizon* (HUYGHE, *Dialogue avec le visible*, 1955, p. 228):

[...]

SYNT. Crête, flanc, pente, pied, sommet d'une colline; colline de sable (cf. dune); monter, descendre une colline. Littér. La double colline. *Le Parnasse (qui a deux sommets)*. [...] [TLF]

Colline. Petite élévation de terrain en pente douce, de forme arrondie. => **Éminence, hauteur, relief.** *Les collines du Perche. Petite colline.* => **Butte, coteau** (--> régional 2. Aspre, baou...). *Les géographes considèrent que la limite entre colline et montagne correspond à une hauteur moyenne de 500 m. Colline très arrondie.* => **Mamelon.** *Le sommet, le pied d'une colline. Penchant d'une colline* (=> **Flanc, versant**). *Collines qui ondulent à l'horizon* (□ Bossuet, cit. 1). *Les sept collines de Rome.* – Poét. *La double colline.* => **Parnasse.** *La Colline inspirée, de Barrès (1913)⁵. (Le Robert, 1989)*

[Garzanti 2002] gives the following:

collina [col-li-na] s.f. 1 rilievo del terreno che in genere non supera i 600m. DIM. *Collinetta* 2 (*estens.*) il territorio o la regione che presenta tali rilievi: *vivere, villeggiare in collina.* ¶ Lat. tardo *collina* (*m*), deriv. di *collis* 'colle'. | Sin. *Altura, colle, dosso, poggio.*

Even if some nuances can be probably brought to the fore when looking at other French and Italian dictionaries, the quoted definitions already reveal a number of differences between *deal* and *colline/collina*:

- when indicated, heights of hills are quite diverse (from 200 to 800m in Romanian; 500m in French; 600m in Italian);
- *Le Robert* is not prescriptive about the height of a “colline”, to the difference of the Garzanti and several Romanian dictionaries: the indication about the altitude differentiating a hill from a mountain appears in a citation, the lexicographer does not take responsibility for it.
- neither of these two definitions indicates that *colline* or *collina* can be used to give directions or to indicate a frontier;
- French hills are characterized by a round form that does not appear in Romanian or Italian definitions⁶; also, slopes of the hills are characterized in French definitions, not in Romanian ones;
- hill as cultivated land is absent from the French and Italian definitions.

Moreover, the definitions of *colină* in Romanian are quite far from those of the two kin words in French and Italian, in spite of their common etymological root:

⁵ Five citations from various authors follow this enumeration of senses and synonyms, and are not given here.

⁶ Hills are round only in a particular description by Vlahută, given as an example in one of the above-quoted definitions.

COLINA, coline: s. f. *Formă de relief mai mică decât dealul; colnic, delușor* – Din fr. colline. [DEX, 1975]

(“Landform smaller than a hill; hillock, small hill – From fr. colline”)

Colină, coline f. *Formă de relief mai mică decât dealul (și lipsită de zone abrupte)*. [Din fr. colline.] [Săineanu, 1998]

(“Landform small than a hill (and without steep slopes).”)

colină¹ sf [At: NEGRUZZI, S, I, 329/V: colin² sn/ Pl: ~ne, (rar) ~ni/ E: fr colline] *Deal mai mic*. [MDA, 2001]

(“Smaller hill.”)

Invariably, *colină* is defined as smaller than a hill, with no other specifications about the contexts of use or its particularities. For the authors of monolingual Romanian dictionaries, *colină* is therefore used when talking about lower landforms, not just about any hill. This means that translators are confronted with a real choice when rendering *colline/collina* in Romanian by *deal* or *colină*, as the two words will not convey the same meaning⁷. Even if collocations such as “*colină cu brazi*”⁸ indicate a certain convergence between the *colină* and *deal* in Romanian (since fir trees need a certain altitude to form forests, an altitude which is not that of the *colină* according to the above-cited Romanian dictionaries), the two words remain imperfect synonyms. This is furthermore proved by the fact that *colină* cannot be substituted to *deal* in several expressions, such as “*deal cu ogoare*” (hill with cultivated lands)⁹. *Colină* seems more appropriate when referring to the round form of hills, a feature not salient in the Romanian *deal*; it is also appropriate for rendering the idea of quite small elevations of earth, *deal* being closer to the

⁷ On the contrary, it seems difficult to find other equivalents than *colline / collina* to translate *deal* in French or Italian.

⁸ « Această *colină*, care aparține la teritoriul băilor, e cultivată în formă de parc, cu locuri de plimbare, cu cărări șerpuitoare și cu *brazi* frumoși, cari sunt încă în desvoltare. » (*Buletinul societății regale române de geografie*, vol. 27-28, București, Socec et Compagnie, 1906, p. 105) ; « Cuprinderea din jurul vulcanului și cercului său de lavă este o întindere netedă, porumbiște și imaș, ici-colo dintr-o *colină cu brazi* » (*Secolul XX*, no. 126, p. 44). Quotations found through interrogating Google books.

⁹ [Gorunescu, 2002] suggests the restriction in use when she talks about the « summit of a hill », since only *deal* is suggested in this case.

'*mountain*', as well as to the idea of a certain effort to be accomplished (either for walking in hills direction, or for crossing the border), as indicated in the first part. It is worth noting that bilingual French-Romanian dictionaries are not the only ones to lack, or at least to underestimate, this specialisation: English equivalents mentioned in introduction do not underline it in a clearer way.

Before closing this section, a word about what may have motivated the authors of French-Romanian bilingual dictionaries to propose *colină* as a quite universal equivalent of *colline/collina*. If phonetic proximity is an obvious explanation, the last part of the French definition suggests an interesting cultural bias. *Le Robert* mentions the "seven hills of Rome", and while this example is not to be found in several Romanian dictionaries, French-Romanian dictionaries give it very often, as well as "double colline = Parnasse", in a kind of encyclopaedic addition to the translation entry:

Colline s.f. 1. (geogr.) colină, deal; colnic; **le sommet d'une** ~ vârful unui deal. 2. (în expr.) la double ~Parnasul; **la ville aux sept** ~s Roma. [Gorunescu, 2002]

("1. (geogr.) Hillock, hill; le sommet d'une ~ the summit of a hill. 2. (phras.) the double ~ Parnassus; the city on the seven ~ Rome.")

A link between the Romanian language and culture and the Latin world is thus manifested, translating something from the personal positioning and ideas of the authors of the dictionaries, and relating, more generally, to the Romanian aspiration to be fully accepted as descendants of Rome; in Romanian school books, the country is often presented as "an island of Latinity in a sea of Slavic". The Latin, or rather Romanic, origin of *colină*, as opposed to the Slavic origin of *deal*, may explain for the push the word receives in such dictionaries, where it becomes a universal equivalent of *deal*, in spite of a more restricted use in Romanian¹⁰.

¹⁰ Similarly, one may note that the word *colină*, rather than *deal*, will be used when characterising the geographical position of a town: Iași, in Romania, is "*orașul celor șapte coline*", in a clear parallel with Rome. However, *colină* remains specialised for a small elevation of earth even in such cases: the Transylvanian town of Cluj is associated with "*dealul Feleacului*", certainly more steep than the '*collines*' of Iași.

Dîmb, colină, deal

As suggested in the previous section, if a *deal* is not a *colină*, and even less a *colline* or *collina*, this may be related to its Slavic origin. However, the relation is not self evident and raises several interesting questions. Whether considering the hills as cultivated or uncultivated land, it cannot be said that the forms and the semantics of Romanian words referring to hills are a simple transposition from Slavic languages.

The first oddity is the form of the word *deal* itself, and more generally the lack of a clear pattern for the origin of landform terms in Romanian. While the language has borrowed *colnic* from the Slavic холм (*kholm* [xołm]), this widespread term is much less used than *deal* or the more recent *colină*, whose success may, however, come from the phonetic proximity with the older *colnic*. Why the old Slavic дѣль (*del*)¹¹ has been preferred to the detriment of '*kholm*'? Why does it have the largest distribution on the territory, as well as the higher use frequency? This large distribution is all the more surprising as it contrasts with the fortune of words *grind* and *grădiște*, also borrowed from Slavic, but which are much less known and used.

While looking towards Slavic language for hills, Romanian borrows *munte*, *muncel* from the Latin *mons*, *montis*. Was there a time when the tripartite system (high, middle and low ground elevations) was based on the semantic differences between *munte*, *grui* (another word for hill, from the Latin *grunium*) and *mușuroi* ('mound', from the Latin *mus araneus*)? Did *deal* come after *grui* and rendered this word quite obsolete, before being itself challenged, to a certain extent, by the Romanic *colină*?

To complete the picture, it is worth observing that *măgură*, mentioned in the introduction as an isolated hill, is close to the Albanese *magullë*; *dîmb* comes from the Hungarian *domb*, while the etymology of *morman* (great pile of different objects, but also elevation of land) is unclear. To the contact of various populations

¹¹ Cf. [DER] ; Mihăilă, 1974.

and cultures, Romanians seem to have borrowed an intricate patchwork of words and representations for landform designation.

On the semantic side, the association of *deal* with forests, trees, or bare land is on the Slavic side, and seems to come from the Polish view of the mountains (*gora*), or small mountains, hills (*gorka*). But while Polish uses *gorka*, as Russian, to designate “a pile of things” (as in the French “*montagne de...*”), Romanian does not use *deal* in such a setting, and specialises the unclearly originated *morman* for conveying such a sense: *un morman de lucruri*¹². Last, but not least, while *colnic* designates a smaller hill, it can also mean a road through the forests, or even a clear space in the middle of the forest – in other words, a deforested part of a hill:

Colnic, s.n. [din bg., srb. Kolnik] 1. *Colină*. 2. *Drum îngust peste deal sau intr-o pădure*. [Breban, 1997]

(“1. Hillock. 2. Narrow road over a hill or through the woods.”)

COLNIC, colnice. S. n. 1. *Colină*. 2. *Drum îngust care trece peste un deal sau prin pădure*. 3. *Loc mic, în pădure, lipsit de arbori; luminiș*. Din bg., scr. Kolnik. [bulgară, sîrbo-croată] [DEX, 1975]

(“1. Hillock. 2. Narrow road over a hill or through the woods. 3. Small space in the woods, where no trees grow. “)

The Slavic influence operates more clearly with regards to the designation of hills as cultivated land, but in a no less curious way. Cultivated hills are *deal cu ogoare*, or *ogorul din deal* in the examples given in the first part of this chapter. Etymologically speaking, such expressions are in fact redundant: *ogor* comes, in Romanian, from the dialectal or vernacular Russian *угор* (*ugor* [ʊ'gor]), denoting a hill, an eminence. Cultivated lands must have been situated preferably on hills, during the period of contact between Daco-Romans populations and the Slavic ones. The association between cultivated land and *ugor* must have been so strong that, in time, *ugor* did not preserve the sense of a landform. All definitions speak about *ogor* as a strictly agricultural term:

¹² The expression « un munte de... » is also attested.

Ogor, ogoare. N. 1. Teren arabil lăsat nelucrat timp de un an (și folosit ca pășune), pentru a deveni mai fertil în anii urmatori; pîrloagă; ogor negru, teren lucrat (arat, grăpat), dar neșemănat timp de un an pentru a se refăce; 2. Bucată de pământ cultivată sau cultivabilă; țarină: cîntau... pe ogor, șezînd în coada sapei. CR.; 3. Cîmp semănat cu același fel de plante, de obicei cereale; lan. Vînt de seară prin ogorul de săcară. AL. 4. Prima arătură care se face toamna sau primăvara, cu mult înainte de semănat. [Din bulg., sb. Ugar].

(“1. Piece of land, apt to be cultivated, unploughed for one year (and used as pasture), so as to become more fertile in the next years; fallow; black field, (ploughed, tilled), but unsown for one year, so as to replenish; 2. Piece of land cultivated or apt to be cultivated; arable land: they... were singing in the fields, leaning on their tools. CR.; 3. Field cultivated with plants of the same kind (usually, cereals); cornfield. The evening wind in the rye. AL. 4. First ploughing, done in autumn or spring, much before sowing.”)

OGOR, ogoare, s. n. Bucată de pământ cultivată sau cultivabilă; țarină. Cîmp semănat cu același fel de plante (de obicei cereale); lan. Teren agricol, proprietate agricolă. Teren arabil lasat nelucrat si necultivat, folosit ca pășune timp de un an, în scopul de a obține în anii urmatori recolte mai bogate; pîrloagă. *Ogor negru* = teren arat, grăpat, etc., dar neșemănat timp de un an pentru a se refăce. Arătura care se face cu mult înainte de lucrările de însămînțare. – Din bg., scr., ugar.

(“Piece of land cultivated or apt to be cultivated; arable land. Field cultivated with plants of the same kind (usually, cereals); cornfield Agricultural field, agricultural domain. Piece of land left uncultivated, used for pasture during a year, so as to replenish the soil and obtain more important crops in the next years. Black *ogor* = a ploughed and tilled piece of land, but not sown during one year, to let it replenish. The field works done much before sowing” [DEX, 1975])

Summary and outlook

To the knowledge of the author of these lines, there is no equivalent for such an evolution in the other Romance languages, and probably not in other languages either – another indication that one should be careful when looking for equivalents of the Romanian *deal*.

If some people’s hills may be other people’s mountains, and vice-versa, the problem posed by the Romanian hills is that these landforms are not *collines/colline*, and nor exactly *kholms*. Differences of height and form are to be found when comparing *deal* with *colline*; differences of aspect when looking at *kholms*

(or even *gorka*), since *deal* can be cultivated. The question remains, however, as to what extent these semantic nuances are to be found in the day to day speech of Romanians, calling for a corpus linguistics approach that is not in the brief of this chapter.

Words denoting 'hill' in Russian dictionaries

Kira Kovalenko

In order to explore Russian equivalents to 'hill', the most prominent dictionaries of the general Russian language were consulted, both bilingual and monolingual ones. The bilingual ones only included English-Russian as English was the starting point for the investigation of landscape words. After having consulted English-Russian dictionaries, it can be observed that they give several equivalents corresponding to the English word 'hill': *холм* [Apresyan, Mednikova; Muller; CD], *пригорок* [Apresyan, Mednikova], *возвышенность* [Apresyan, Mednikova; Muller], *возвышение* [Muller]. In the online search system ABBYY Lingvo Live¹, the same equivalents are given. The same is true for the online resource *Reverso Context*² where *холм* is the predominant equivalent for 'hill'. Considering all sources, *холм*³ is the predominant equivalent and the only one that can be found in all sources.

It can be observed that the concept of what a 'hill' is, differs greatly in Russian dictionaries, depending on the lemma, but also on said dictionaries: *Возвышенность* and *возвышение* 'elevation' are more general words denoting an area of high ground, but terminologically, *возвышенность* 'elevation' has a height of more than 200 m [BED 1991: 235], whereas *холм* – the predominant lemma denoting 'hill' – is up to 200 m in height [Barkov 1954: 278, BED 1991: 1460]. *Возвышение* is a close synonym of *возвышенность*, but it is not used

¹ www.lingvolive.com (December 2018).

² <http://context.reverso.net/перевод/английский-русский/hill/> (December 2018).

³ IPA transcription is given only for words existing in modern Russian and included in the *Academic Dictionary of the Russian Language*.

as a geographical term and has a broader meaning in general. Speaking of the predominant lemma, it has *пригорок* as one of its synonyms, which is not used terminologically and usually translates as ‘*hillock*’.

The Dictionary of the Russian synonyms regards *возвышенность*, *возвышение* and *пригорок* as words semantically close to *холм*. Besides these, the entry contains *бугор*, *нагорье*, *пригорок*, *увал*, *взгорье* (colloquial), *взгорок* (colloquial), *угор* (vernacular), and *взлобок* (vernacular) [Aleksandrova 2001: 59], but not all of these are full synonyms for *холм*. For example, *нагорье* is translated as a tableland, plateau, upland region (ABBYY Lingvo Live). Others are translated as *hillock* ‘small hill’⁴. Nevertheless, we decided to include words equivalent to *hillock* as we have no idea of the lowest height of a hill, while ‘small hill’ still embodies the idea of ‘naturally raised area of land, not as high or craggy as a mountain’⁵. That is a reason why all diminutive forms will be represented in the research, and also *горка* (diminutive of *гора* ‘mountain’), which is usually translated as ‘hill, hillock’ (ABBYY Lingvo Live). Besides, it must be taken into consideration that diminutive forms in Russian not only express the idea of smallness of quantity or size, but emotional-expressive nuances as well: tenderness, disparagement, irony, condescension and familiarity [Bratus 1969: 2-3]. They should thus be considered as equal to other lemmas in terms of meaning, even though the form suggests a subordination to another lemma.

Russian words denoting ‘*hill*’: etymology, meaning, and derivatives

Returning to our predominant form for ‘*hill*’, *холм* [xоlm] is ‘a small elevation, usually of round or oval form, with gentle slopes’ according to the Academic Dictionary of the Russian Language [BAS 17: 332]. This fits well with what is found in description of a hill in other languages. The height, however, is different

⁴ Colloquial and vernacular words are not represented in the dictionaries at all, but that shall not be commented on further as these types have not been the main focus of this research.

⁵ <https://en.oxforddictionaries.com/definition/hill/> (December 2018).

from what is described in other languages, but that does not come as a surprise. Height varies greatly depending on the language and (landscape) culture. A descriptions like English ‘light slope’, French ‘legère pente’, Portuguese ‘ligeira inclinação’ and German ‘leichte Anhöhe’ is the most common feature shared in dictionary descriptions across many different European languages.

Further research has shown that *холм*, Proto-Slavic *xъlmъ, originated in the Germanic root *hulma- and is a cognate of old Islandic *holm* ‘small island’ [Vasmer 4: 255; ESSJa 8: 138-139]. It thus can be found in the oldest dated East Slavic book *Orstromir Gospels* of 1056 or 1057, where *хѣлмѣ* was an equivalent for βουνός ‘hill, mound, elevation’ [Dvoretzky 1: 304] as can be drawn from the following line in Luke 3:5 πᾶσα φάραγξ πληρωθήσεται καὶ πᾶν ὄρος καὶ βουνὸς ταπεινωθήσεται was translated as *Въсака дѣбрь наплѣнитъса и въсака гора и хлѣмѣ⁶ сѣмъпритъса* [Sreznevsky 3: 1425] — ‘Every valley shall be filled, and every mountain and hill shall be brought low’⁷. In the Sreznevsky dictionary the word *хѣлмѣ* has another meaning, which is ‘embankment, mound, wharf’. Unfortunately, the compiler gives only one example — from the *Chronicle of George Hamartolos*, translated into Church Slavonic in the 11th century [Sreznevsky 3: 1425], where *холмѣ* is an equivalent for the Greek μῶλος ‘dam, pier’ [Dvoretzky 2: 1118].

Another correspondence between the Greek and Russian words can be found in the Russian handwritten lexicons, in word entries *Ксило*⁸, *сухіѹ холмѣ*⁸ — ‘Ksilof, dry hill’ and *Ксилосѣ, сухіѹ холмѣ*⁹, *или полднѣ*¹⁰ — ‘Ksilos, dry hill, or half of the day’. As in many other cases, it is very difficult to decide why the compiler of the lexicon chose such an explanation. However, this little analysis shows the connections all over Europe that *холм* ‘hill’ possesses. Besides, *холм* is

⁶ The word *хлѣмѣ* is written in the Church Slavonic spelling here.

⁷ www.bible-center.ru/ru/bibletext/synnew_ru/lu/3#ed_sel=kjv_eng/ (December 2018).

⁸ Manuscript of the Russian State Library, G.G. Yudin’s collection (fund 594), № 4 (1625-1626), 57r.

⁹ Manuscript of the Russian State Library, G.G. Yudin’s collection (fund 594), № 4 (1625-1626), 57r.

¹⁰ Manuscript of the Russian National Library, M.P. Pogodin’s collection, № 1642 (1630s), 80r.

more than a descriptor for a landscape feature. It can also be used as a toponym as there is an old town *Холм* in Novgorod Oblast and also a former district in Novgorod Velikiy¹¹.

On the monolingual level, there is a large number of words derived from the *холм* with diminutive or magnifying meanings: diminutives **хълмьць** or **холмецъ** [Sreznevsky 3: 1425], **хо'лмик** ['xołm'ik] [SAR 6: 567; Sl.1847 4: 407, Dahl 4: 510], **хо'лмичек** ['xołm'itɕek] [Sl.1847 4: 407], **холмо'к** [xɛł'mok] [Dahl 4: 510], **холми'шка** [xɛł'miškə] [Dahl 4: 510], magnifying form **холми'ще** [xɛł'm'i:ɕe] [SAR 6: 568; Dahl 4: 510]. Only one of them — *холмик* — is represented in the dictionary of modern Russian [BAS 17: 333], although *холмок*, and *холмишко* can be found sporadically in the literature of the 20th century¹². *Холм*, *Холмы*, *Холмец*, *Холмок*, and *Холмище* are also used as village names¹³.

But although *холм* is the most common word for 'hill', there is a number of related words covering similar features. We will take a closer look at these in the following, starting with the word **бугор** [bo'gor] that shows a very close notion to *холм*. Most of the dictionaries interpret it as 'a small hill, hillock' [Sl.11-17 2: 344; Sl.18 2: 153; Dahl 1: 119; BAS 1: 664], but sometimes it either has the same meaning as 'hill' [Sl.16-17 1: 296], or *холм* 'hill' is explained as a 'small hillock' [SAR 6: 567-568].

Бугор is supposed to be a Proto-Slavic word (*bugъrъ/bugorъ), which is a cognate to words in Latvian (*baūgurs* 'elevation, hill', *bugurāins* 'hilly', *bauga* 'fishing float' and *budzis* 'struma'), Sanskrit (*bhugnás* 'bent'), Old Upper German and Gothic (*biugan* 'bent') [Vasmer 1: 228; ESSJa 3: 79]. But its first written evidence is found only in 1575; since 1629 it has been known by another meaning — 'a pile' [Sl.11-17 2: 344]. Similar meanings — 'small elevation of earth' and 'a pile of sand or snow blown by wind' — were given in the first Academic Dictionary

¹¹ The spelling of the word reflects so-called "secondary pleophony" (see details in [Bethin 1998: 77]).

¹² Manuscript of the Russian National Library, M.P. Pogodin's collection, № 1642 (1630s), 8ор.

¹³ en.wikipedia.org/wiki/Kholm,_Kholm'sky_District,_Novgorod_Oblast / (December 2018).

[SAR 1, part 2: 234]. But even though the second meaning (in a broader sense) was given in the dictionary of 1847 as well ('a pile in the shape of pyramid or prism' [Sl.1847 1: 86]), which testifies to its having existed in the language for quite a long period of time, the meaning did not survive.

According to Dahl's dictionary, *бугор*, apart from 'hillock', denotes 'a hill made by moles, marmots, etc.' [1: 119]. The word has preserved this meaning up to the present. Later, some other shades of meaning were developed, such as 'small elevation on the earth, stones or sand', 'grave', and 'wave on the water' [BAS 1: 664-665].

In the last edition of BAS, *бугор* also denotes 'border', when it is used in collocations *за бугром* 'over the hill', *из-за бугра* 'from over the hill' and so on (the meaning has the label 'vernacular') [BAS3 2: 229]. Another meaning which had not been registered before is 'elevation on something (referring to people or animals)'. It could have been borrowed from the diminutive form *бугорок*.

Derivatives of *бугор* with the meaning 'small hill' are **бугорок** [bʊgʲɐ'rok] [SAR 1 part 2: 234; Sl.1847 1: 86; Dahl 1: 119; BAS 1: 665], **бугорочек** [bʊgʲɐ'rotɕik] [Sl.1847 1: 86; Dahl 1: 119; BAS 1: 665], and **бугорчикъ** [bʊ'gortɕik] [Dahl 1: 119]; magnifying forms are **бугрище** [bʊ'grʲiɕ:ɪ] [SAR 1, 2: 234; Sl.1847 1: 86; Dahl 1: 119], and **бугорище** [bʊ'gorʲiɕ:ɪ] [Dahl 1: 119]. Now only two of them are used in the literary Russian language — *бугорок* and *бугорочек*, whereas *бугорчик* is preserved in Voronezh dialects meaning 'a pile of manure brought down on the earth from a cart' [SRNG 3: 238]. Apart from 'small hill', *бугорок* can also denote 'small elevation of the leaves or skin; knob' [BAS 1: 665] in modern Russian; for the first time, it was recorded in Dahl's dictionary as 'abscess on the inner or outer parts of the body' [1: 119]. The words *Бугор*, *Бугры*, *Бугорок*, and *Бугорки* are also used as toponyms⁴⁴.

As can be observed, diminutive suffixes are very often involved in word formation in the Russian language. Therefore, a word denoting a bigger elevation

⁴⁴ The data is taken from the electronic resource "The Lexicographer Library" — local text archive stored in the Institute for Linguistic Studies, Russian Academy of Sciences (compiler A.A. Burykin).

on the earth — e.g. *гора* ‘mountain’ — may describe a different concept, but its diminutives can form words that carry meaning that equate to ‘hill’.

The diminutive of *гора*, **го́рка** [ˈgorkə], has quite a vague meaning, as it can denote ‘small mountain’, ‘hill’, and also ‘pile’, ‘small cupboard’, ‘a slide for children’, ‘ice-hill’, ‘an aerobic maneuver “45° up line”’ and ‘a sort of a card game’ [BAS 3: 264-265]. Some of them were registered in the 19th century in Dahl’s dictionary [1: 332].¹⁵ The word *горка* has existed since the Old Russian language period: the oldest form appeared in Flavius’s “The Jewish War”, which was translated into Church Slavonic in the 11th century and is known in copies of the 16th century [Sl.11-17 4: 86]. In the singular and especially in the plural form, the word has often been used as a geographical name since the 16th century [Sl.11-14 2: 361]¹⁶. The diminutive of *горка* **го́рочка** [ˈgorət͡ɕkə] has been registered since 1847 [1: 281]¹⁷.

In terms of Russian words denoting ‘hill’, *гора* is the origin of some derivatives that mean ‘hill’ or the like as well. These will be dealt with in the following, thus completing the collection of the Russian hill semantics: **Пригорок** [prɪˈgorək] ‘hillock’, registered since 1847 [3: 461], is initially a diminutive form from the

¹⁵ ru.wikipedia.org/wiki/Холм_(значения), ru.wikipedia.org/wiki/Холмы, ru.wikipedia.org/wiki/Холмец, ru.wikipedia.org/wiki/Холмок, wikipedia.org/wiki/Холмище / (December 2018).

¹⁶ ru.wikipedia.org/wiki/Бугор, ru.wikipedia.org/wiki/Бугры, ru.wikipedia.org/wiki/Бугорок. / (December 2018).

¹⁷ The word is also used in the collocation *Красная горка*, literally ‘Red hillock’. The latter was a folk feast of the coming spring, the time of weddings and festivals with singing and dancing [Nekrylova 2007: 694-696]. Dahl explains it as ‘Tuesday on the second week after Easter’, but this must be a regional meaning. In BAS *Красная горка* is ‘the next week after the Easter Week’. Such an explanation could have appeared because of the word *неделя*, which means ‘week’ in Russian and ‘Sunday’ in Church Slavonic. In the last edition of BAS we can find the correct widespread (not regional) meaning ‘first Sunday after Easter — Old Russian folk feast in spring. With the spread of Christianity, it was timed to the first Sunday after Easter (Thomas’s day)’ [BAS3 8: 592]. The word is also used in the proverb *Уходили (укатали) Сивку крутые горки*, where it is applied to a person who has lost his strength struggling against life’s difficulties and obstacles [BAS 3: 264]. A possible English equivalent is *the old gray mare ain’t what she used to be*.

now obsolete **пригоръ** [Sl.11-17 19: 135], which is a diminutive from *пригорок* is **пригорочек** [pri'gorətɕik] (registered since 1847 [3: 461]), vernacular morphological variant — **пригорье** [pri'gor'je] [BAS 11: 431].

Взгорок ['vzgorək], registered since 1790 [SAR 1, part 2: 234], and **взгорье** ['vzgor'jə], registered since 1847 [1:120] (a phonetic variant in the latter in the 18th century — **взгорие** [Sl.18 3: 120]) also mean 'hillock'. Both words are colloquial in modern Russian. In the 17th century they were often used, mostly in official documents (as opposed, if you will, to literary works) [Sl.11-17 2: 147; Sl.16-17 2: 159]. That was the reason why they appeared in the first Academic dictionary only in the middle of the 19th century [1847 1:120]. The diminutive from *взгорок* **взгорочек** ['vzgorətɕik] was registered in the 17th century [Sl.11-17 2: 147] and then given in the Academic dictionaries on a regular basis [SAR 1-2: 234; Sl.1847 1: 120; BAS 2: 295].

A dialect word that is connected with *гора* is **уго'р** [u'gor] denotes 'hill, elevation'. Although it does not belong to the literary Russian language, it is given in the Academic Dictionary of 1950-1965 with a label 'dialectal'). Its derivative **уго'рокъ** [u'gorək] 'hill' was given in the dictionaries of 1847 [4: 323] and 1864 [Dahl 4: 430]. Another dialect word with the meaning 'hill' is **ува'л** [u'vaɫ] [SRNG 46: 157]. In the literary Russian language it means not exactly 'hill', but 'stretched in length, elevation with gentle slopes' [BAS 16: 97]. **Взло'бок** ['vzlɔbək] 'elevation, small hill', which has been known since the 17th century [Sl.16-17 2: 163] and given in the dictionaries of the 20th century as vernacular [BAS 2: 309; Aleksandrova 2001: 59], is said to have come out of the literary language nowadays and became a dialect word — at least it was given this label in the last Academic dictionary [BAS3 2: 522]. Other dialect equivalents, which are quite numerous, can be found in the Dictionary of Russian Dialects [SRNG] and in the articles describing dialect data, for example [Lekareva 2002].

To sum up, the words denoting 'hill' seem a rather stable semantic group of words. Nevertheless, it has been made clear that the semantics in some cases varies to a great extent, ranging from 'elevation' (which can be many things, amongst others a wave) to 'hill'. The most commonly used word is *холм*; another

one — *бугор* — means ‘small hill, hillock’. During the history of the Russian language, they have developed a lot of diminutive and magnifying forms, but only some of them have remained in modern Russian. Derivatives from the word *гора*, such as *горка*, *пригорок*, *взгорье* and *угор*, are more rarely used. Some of them are vernacular or dialectal.

TEI mark up of the Academic dictionary entry *холм*

TEI mark up for the Academic dictionary entry *холм* [BAS 17: 332-333] can be suggested as follows:

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<entry>
<form><orth>Холм,</orth>
<gramGrp>
<m type="Gen">a,</m>
<number>мн,</number>
<w>холмы,</w></gramGrp>
<gen>м.</gen></form>
<sense><def>Небольшая возвышенность, обычно округлой или овальной формы, с пологими склонами.</def>
<cit>
<quote>Здесь вижу двух озер лазурном равнины, .. За ними ряд холмов и нивы полосаты, вдали рассыпанные хаты.</quote>
<bibl><author>Пушк.</author>
<title>Деревня.</title></bibl>
</cit>
<cit>
<quote>Наступит в марте весна, побегут грязные ручьи с холмов, оттает земля и задымится теплым паром.</quote>
<bibl><author>Гонч.</author>
<bibl>Обломов,</bibl> I, 9.</bibl>
</cit>
<cit>
<quote>Блиндаж был вырыт на скате лесистого холма.</quote>
<bibl><author>А. Н. Толст.</author>
<title>Сестры,</title> 22.</bibl>

```

</cit> ◊ <usg>В сравн.</usg>
 <cit>
 <quote>Теперь я мог видеть реку с обоими берегами. Над ней холмами то там, то сям носился легкий туман.</quote>
 <bibl><author>Чех.</author>
 <title>В сумерках.</title></bibl>
 </cit> ◊ Могильный холм. <cit>
 <quote>В самом бедном углу кладбища, среди осыпавшихся, размытых дождями и распыленных ветром могильных холмов, на одном из них.. сидела пожилая женщина.</quote>
 <bibl><author>М. Горький,</author>
 <title>Колюша.</title></bibl>
 </cit> □ <usg type="time">Устар.</usg> Род. ед. хо'лма, мн. хо'лмы. <cit>
 <quote>Да скачут холмы, как тельцы, Как овны, да взыграют горы.</quote>
 <bibl><author>Крыл.</author>
 <title>Подражание псалму,</title> 96. </bibl>
 </cit>
 <cit>
 <quote>На холмах Грузии лежит ночная мгла; Шумит Арагва предо мною.</quote>
 <bibl>Пушк.</bibl>
 </cit>
 <cit>
 <quote>На холмах Грузии.. Одни на холмах жгут огни, Завесы мрака разрывают.</quote>
 <bibl><author>Блок,</author>
 <title>Не доверяй своих дорог.</title></bibl>
 </cit> // <label type="metaphorical">Перен. </label> <def>О возвышении на водной поверхности; водяной вал, волна.</def>
 <cit>
 <quote>Огромные холмы с белым гребнем, с воем толкая друг друга, встают, падают, опять встают.</quote>
 <bibl><author>Гонч.</author>
 <title>Фрег. «Паллада»,</title> I, 2.</bibl>
 </cit>
 <cit>
 <quote>Тысячи белых холмов высоко вздулись на море, кружатся, пляшут.</quote>

<bibl><author>М. Горький,</author>
 <title>Едут...</title></bibl>
 </cit> ◊ Водяной холм. <cit>
 <quote>[Канонерка “Залетная”] качалась на волнах, как скорлупа, то скатываясь в
 разверстые бездны, то снова поднимаясь на водяные холмы.</quote>
 <bibl><author>Нов.-Прибой,</author>
 <title>Шалый,</title> 5.</bibl>
 </cit>
 <cit>
 <quote>Ленивые лучи прожекторов скользили по вершинам водяных холмов.</quote>
 <bibl><author>Борзенко,</author>
 <title>Повинуясь законам Отечества,</title> 4.</bibl>
 </cit> // Перен. <def>О куче, груде каких-нибудь предметов. Холм чего-нибудь, из
 чего-нибудь.</def>
 <cit>
 <quote>Холмы снега.</quote>
 </cit> □ <cit>
 <quote>В одном мгновенье бранный луг Покрыт холмами тел кровавых.</quote>
 <bibl><author>Пушк.</author>
 <title>Руслан и Людм.</title> 6.</bibl>
 </cit>
 <cit>
 <quote>Заходит солнце, в поле, на холмах мусора, лежат красивые отсветы
 зари.</quote>
 <bibl><author>М. Горький,</author>
 <title>Тимка.</title></bibl>
 </cit>
 <cit>
 <quote>В глубине пещер они спасались от зимних стуж. До сих пор там еще видны
 холмы из рыбьих костей.</quote>
 <bibl><author>А.Н. Толст.</author>
 <title>Аэлита.</title></bibl>
 </cit></sense>
 <note>— С иным <label type="time">(устар.)</label> удар.: род. ед. <w>хо́лма,</w>
 мн. <w>хо́лмы</w> (прим. см. выше).</note>
 <note>— <bibl><author>Берында,</author>

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<title>Лекс.</title>  
<time>1627:</time></bibl>  
<w>холм.</w></note>  
</entry>
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Words denoting ‘hill’ in Portuguese and Brazilian dictionaries

Laura do Carmo, Alina Villalva & Esperança Cardeira

Translation is a peculiar and complex domain of language contact. Peculiar, because the semantic sameness of the two linguistic inputs (source language and target language) is a mandatory requirement; and complex, because reaching that sameness is a goal that may be defied by both linguistic and non-linguistic complex circumstances. Though we are well aware that word equivalences are perhaps a minor part of this demanding task, we also know that they occupy a focal point as tools *par excellence* in any translation exercise, and bilingual dictionaries are crucial for that purpose. However, and quoting Verdelho & Silvestre, eds (2011: 5, 6), though “bilingual dictionaries are a privileged source for the study of language and culture”, they are “generally considered as ancillary lexicography” (our translation). Yet they have had an undeniably important role in historical lexicography.

In this chapter, we will ultimately argue (i) that the quality of bilingual dictionaries hinges on the quality of monolingual dictionaries; (ii) that monolingual and bilingual dictionaries must be able to dialogue, which will benefit them both; (iii) that they both must learn from the past, namely from the lexicographic heritage, and historical usage; and (iv) that they should pay attention to contemporary use, documented by contemporary corpora.

Hereafter, we will present a survey of bilingual dictionaries pairing English and Portuguese since their inaugural titles, in the 18th century. Then we will discuss a case study based on the Portuguese equivalents for the English word ‘hill’, which enabled us to observe that:

- (i) the Portuguese list of equivalents has changed over time;

(ii) some of these changes are related to external factors that may have influenced the selection of one lexical item over another.

(iii) some equivalents (e.g. *colina* and *morro*) have been recently introduced;

(iv) these novel equivalents may be specific to only one language variety (e.g. *morro* in Brazilian Portuguese, *colina* in European Portuguese)

Subsequently, we will look at each of the most frequently used Portuguese equivalents for *hill*, namely *encosta*, *outeiro*, *monte*, *colina* and *morro*. And finally, we will talk about the consequences of the existing gap between dictionaries and usage.

Portuguese bilingual dictionaries

Verdelho & Silvestre, eds (2011) is a landmark for the study of Portuguese bilingual lexicography. It has had the enormous merit of proving the relevance of the study of these dictionaries, but, more than that, it demonstrates that the practice of bilingual lexicography has a direct bearing on the lexicon of both languages involved. In this chapter, our attention is mostly focused on Portuguese and its relationship with English.

Portuguese modern bilingual lexicography emerged in the mid 18th century, roughly two hundred years after the beginning of the production of dictionaries for Portuguese, though by then, following [Nebrija]'s and [Calepino]'s models, Latin was an important descriptive tool for monolingual dictionaries.

The main target languages for bilinguals were French, English and Italian, which mirrors the speaker's main intercommunicative needs, within and outside Portuguese-speaking domains. According to Verdelho & Silvestre, eds (2011: 6), the alignment of the Portuguese vocabulary with those of other languages offered the chance to import scientific and technological vocabularies, and to incorporate word-formation resources. This claim can be illustrated by mentioning the recent introduction of neoclassical compounding or the suffixation with *-ismo*. These authors also claim that the lexicographic partnership between Portuguese and

French was the most fruitful (cf. Verdelho & Silvestre, eds 2011: 7). Nevertheless, English has also received some attention.

English – Portuguese dictionaries

The survey of the history of English-Portuguese dictionaries presented below is largely indebted to Verdelho's (2011) diachronic survey. As far as we know, the first item in this list was published in London, in 1701¹. This is a quasi-anonymous dictionary (the author is A.J.)², called *A Compleat Account of the Portugeze Language*. Though it was not an editorial success, [Vieyra 1773], the author of the first popular bilingual dictionary pairing Portuguese and English, published some seventy years later, in 1773, acknowledged this dictionary. [Vieyra 1773] also thoroughly used [Bluteau]'s *Vocabulário*, published roughly half a century before, and mentions his predecessor by confiding "I say with truth, that it [meaning A. J. (1701)] has not been to me of the smallest use".

[Vieyra]'s dictionary was a success for more than a hundred years. The original edition received several revisions by other authors (namely Jacinto Dias do Canto), which may explain the lack of serious competitors. In the preface addressed "To the [English speaking] reader", [Vieyra] lists the goals of his dictionary. It should:

- i. be as copious as possible;
- ii. provide clear and accurate exemplification of the semantics of the same word in both languages;
- iii. only use English words authorized by English writers;
- iv. give the etymology of Portuguese words from other languages;
- v. insert a considerable number of technical words;
- vi. indicate Portuguese and English obsolete, little used or poetical words.

However, according to Verdelho (2011: 28), [Vieyra] promises more than it accomplishes. Verdelho points out that the Portuguese-English dictionary has many

¹ Portuguese was also included in [Minsheu]'s *Ductor in Linguas*, published in 1617, but we were not able to locate a copy of this multilingual dictionary. We thank Dewi Evans for this information.

² Cf. Kemmler (2012).

inconsistencies; the coverage is not impressive (the Portuguese word list includes less than 25.000 entries), and there are many missing words and excessively long entries in cases such as *mão* ‘hand’, which has 119 subentries. The English-Portuguese part is of better quality, and was certainly influenced by the British lexicographic tradition and the help of [Bailey] and [Johnson 1755].

The second half of the 19th century brought some diversity. Three major pieces of work were produced [Lacerda 1866], [Bensabat], and [Michaelis 1893] and at least two sets of dictionaries that aimed and managed to get to a wider audience (cf. [Valdez A], [Valdez B] and [DdP 1885], [DdP 1888]) were also published. [Lacerda 1866] is a heavy two-volume work that did not become as popular as its predecessor. It is an adaptation of [Fleming & Tibbins], probably from the 6th edition, published in Paris, in 1857.

According to Verdelho (2011), this is an interesting dictionary, but [Valdez A] and [Valdez B], published nine years later, and meant to be used everywhere, are also quite interesting. [Lacerda 1866]’s dictionary was heavily criticized by Bensabat, namely for listing words such as *photographia*, which would become a common word for a now quite common artifact.

Nevertheless, [Bensabat] managed to become a source for many later dictionaries (cf. Verdelho 2011: 59), namely for the subsequent [DdP 1885] and [DdP 1888]. He invokes the role model of “Johnson, Webster, Grant, Richardson, etc” and he promises originality, but the main virtue of this dictionary was the simplification and handiness. The many *Dicionarios do Povo* were, according to Verdelho (2011), a praiseworthy initiative. There is no information on authorship, since the purpose of these dictionaries was not the glorification of someone’s erudition, but the ‘instruction’ of the people of Portugal and Brazil, a commercially biased intention endorsed by many publishing companies at that time.

The last item on this list is the dictionary of [Michaëlis 1893]. Henriette Michaëlis was the older sister of a Portuguese by marriage of the notable philologist, Carolina Michaëlis de Vasconcelos. This dictionary was originally published in Germany, Henriette’s homeland, and it was a huge success throughout the 20th century and remains so in the 21th century, to the point that it is still popular, particularly

in Brazil. According to Verdelho (2011: 61), it offers a valuable contribution, but it also reveals inconsistencies that are due to the fact that the author is not a native speaker of Portuguese.

In Verdelho & Silvestre, eds (2011: 221), we can also find a paper on contemporary English-Portuguese and Portuguese-English dictionaries, by Tim Oswald, that pinpoints some of their major problems. One of them regards the fact that the available dictionaries use different language pairings, which, in most cases, are not clearly stated. Oswald claims, “the English side of the dictionary may be, and is, North American, British or even South African in standard and the Portuguese side European or Brazilian Portuguese.” The case study that we will present (i.e. ‘*hill*’) clearly illustrates this issue on the Portuguese side. The missing information on the variety of Portuguese compromises the information for the dictionary user.

Another relevant issue regards the industry. Commercially available dictionaries on paper do not attract new investment, which is understandable. The problem is that online dictionaries do not attract it either – they generally correspond to the transformation of a previously existing paper dictionary, though they are presented as a novelty. Things get even more problematic when the pseudo-new online dictionaries become collaborative or semi-collaborative projects. The collaboration that they are looking for is unpaid and of an uneven quality, but the end result allows the publishers to claim that they promote constant updating.

In sum, as our case study will help to demonstrate, contemporary bilingual dictionaries are not fully reliable sources of information.

About ‘*hill*’

Within LandLex, the English word ‘*hill*’ was elected as a promising case study, because it looked like a simple landscape word, both from a morphological stand and from a semantic viewpoint. As we will see, that is not exactly the case, but, in fact, it never is.

As a starting point, we have taken into account some monolingual lexicographic descriptions of ‘*hill*’, such as the one that can be found in the [OED 1961] and in the [CDO]:

hill = A natural elevation of the earth’s surface rising more or less steeply above the level of the surrounding land. Formerly the general term, including what are now called mountains; after the introduction of the latter word, gradually restricted to heights of less elevation; but the discrimination is largely a matter of local usage, and of the more or less mountainous character of the district, heights which in one locality are called mountains being in another reckoned merely as hills. A more rounded and less rugged outline is also usually connoted by the name.

[OED 1961]

hill = **1** an area of land that is higher than the surrounding land; **2** a slope in a road.

[CDO] (June 2018)

The [OED 1961] entry is interesting, since it defines ‘*hill*’ as “a natural elevation of the earth’s surface rising more or less steeply above the level of the surrounding land”, but it also states that this general meaning of ‘*hill*’ was lost when the word ‘*mountain*’ was introduced. The difference between ‘*mountain*’ and ‘*hill*’ is allegedly related to their height, but the [OED 1961] cautiously claims that the distinction is circumstantial, depending on local relevance, as other before him also did – [Webster] is a good example.

hill = A hill is less than a mountain, but of no definite magnitude, and is sometimes applied to a mountain.

[Webster]

The [CDO] entry presents the general meaning of the word, but its relevance comes from the fact that it adds a new one, which is ‘a slope in a road’. Whilst hills obviously have slope, the second definition seems odd and is only justified by an example that says ‘*This car has difficulty going up steep hills*’.

The [TOED] resonates the [OED 1961] information, assigning ‘*hill*’ directly to a Proto Indo-European semantically equivalent etymon and relating both ‘*mountain*’ and ‘*mount*’ to Old French loans, borrowed in the 13th century.

hill (n.) = Old English *hyll* “hill,” from Proto-Germanic *hulni- (source also of [...] Old English *holm* “rising land, island”), from PIE root *kel- (2) “to be prominent; hill.” Formerly including mountains. [...] In Great Britain heights under 2,000 feet are generally called hills; ‘mountain’ being confined to the greater elevations of the Lake District, of North Wales, and of the Scottish Highlands; [...]. The term *mountain* is very loosely used. It commonly means any unusual elevation. [...] Despite the differences in defining mountain systems, Penck (1896), Supan (1911) and Obst (1914) agreed that the distinction between hills, mountains, and mountain systems according to areal extent or height is not a suitable classification. [...]

mount (n.1) = “hill, mountain,” mid-13 c., from Anglo-French *mount*, [...] from Latin *montem* (nominative *mons*) “mountain,” from PIE root *men-(2) “to stand out, project.”

mountain (n.) = c. 1200, from Old French *montaigne* [...] (from PIE root *men-(2) “to project”). Until 18 c., applied to a fairly low elevation if it was prominent (such as Sussex Downs, the hills around Paris). [...]

As usual, the introduction of loans destabilizes the coherence of the lexical domain that hosts them – that might explain the difficulty to establish a strict hierarchy of heights between ‘*hills*’, ‘*mounts*’ and ‘*mountains*’.

Portuguese equivalents for *hill*

We will now look at the pairings that ‘*hill*’ gets in Portuguese lexicographic registers since the 18th century. [A.J.], [Vieyra 1773] and [Vieyra 1850-1851] give two different equivalents: *monte*, in the first case; *outeiro*, in the second.

A hill – O *mónte*.

A little hill or hillock – O *outeiro*, o *outeirinho*, e o *montão*.

A rough, stony, and hard hill – A *rócha*, o *penédo*, a *pénna pedregósa*.

The ridge or top of an hill – O *cabéço* de *mónte*, a *sobrancelha* de *mónte*.

The side of a hill – A *ladeira* de *mónte*.

The foot of an hill – A *cósta* ou *ladéira* de *mónte*.

[A.J.]

Hill = hum *outeiro*

Hillock = hum *outeirinho*

Hilly = cheo de outeiros

[Vieyra 1850-1851]

Hill = outeiro, monte, pico

Hillock = outeirinho

Hilly = cheo de outeiros

[Vieyra 1860]

For [A.J.], *outeiro*, *outerinho* and *montão*, listed as synonyms, are the small counterparts of ‘hill’ (e.g. a ‘little hill or hillock’); the same meaning is assigned only to *hillock* by [Vieyra 1773]. [Vieyra 1860] adds *monte* and *pico* to the ‘hill’ entry, but *outeiro* is still the first choice.

[Lacerda 1866] brings new additions to the equivalents of ‘hill’ (i.e. *eminencia*, *elevação*, *altura*, *colina*, *cerro*, *encosta*, *outeiro*), certainly inspired by [Fleming & Tibbins].

It is interesting to see that *outeiro*, the first equivalent in [Vieyra 1773] and [Vieyra 1860], becomes the last in [Lacerda 1866]. The first two are generic terms; they provide a kind of definition that follows [Fleming & Tibbins]’s model.

hill = *eminencia*, *elevação*, pequeno monte, *monticulo*, *altura*, *collina*, *cerro*, *encosta*, *outeiro*. *The top, the cliff and the foot of a --*, o cume, o declive e a falda do monte.[...] *By -- and dale, up -- and down dale*, por montes e por valles. *Up the hill*, ladeira acima. *Down the hill*, ladeira abaixo.

hillock = s. *collina*, *altura*, *eminencia*, *elevação*, *cabeço*, *comoro*.

hilly = adj. *montanhoso*, *montuoso*, cheio de montes, *alpestre*. *A -- country*, paiz montanhoso. [Lacerda 1866]

hill = [an elevation of ground], *éminence*, *élévation*, *petite montagne*, *monticule*, *hauteur*, *coteau*, *colline* [...]

hillock = [a little hill] *une colline*, *une hauteur*, *une éminence*, *un petit tertre*, *elevation*.

hilly = [full of hills] *montagneux*, *montueux*, *plein de montagnes* [...]

[Fleming & Tibbins]

Therefore, the first equivalent is *monte*, modified by the adjective *pequeno* ‘small’, thus establishing the size hierarchy between ‘hill’ and some other unstated word.

Monte also occurs in the translation of the expression *by hill and dale* and in the explanation of *hilly* as *cheio de montes* ‘plenty of *montes*’, whereas [Vieira A] used *cheio de outeiros*. Another interesting observation regards the translation of *up the hill* by *ladeira acima*. Notice that [A. J.] used the same noun, i.e. *ladeira* as a translation of *side*: *side of a hill* would be a ‘slope’, not just *hill*: *The side of a hill*: *A ladeira de monte*. *Encosta*, a word semantically close to *ladeira*, is used by [Lacerda 1866] as an equivalent of ‘*hill*’, for the first time.

According to Verdelho (2011: 42-43), [Valdez A] and [Valdez B] were influenced by [Lacerda 1866]. The entry ‘*hill*’ shows indeed some similarities, but it deserves further notice because this is the first time that *colina* is promoted to the top of the equivalent list. This dictionary does not include *monte* in the definitions of any of the entries.

In [Valdez B], *encosta* is a member of ‘*hill*’s equivalent list, as for [Lacerda 1866], and it is also an equivalent of *hillside*. These entries seem to document that *hillside* is one of the meanings of ‘*hill*’ – a polysemy that does not affect its Portuguese equivalents (i.e. *outeiro*, *monte*, *colina* or *morro*).

hill = collina, outeiro, encosta, eminencia. *Up __work* = ladeira acima.

hillock = pequena colina, eminencia

hillside = encosta, ladeira

hilly = montanhoso

[Valdez B]

The following dictionary (i.e. [Bensabat]) offers a new ordering of the equivalents: *monte* is on top of the list, as in [Lacerda 1866], and it is often used to paraphrase ‘*hill*’s derivatives (*hilled*³ = *que tem montes*, *hilly* = *cheio de montes*), compounds (*hill-slope* = *declive do monte*, *hill-top* = *cume do monte*) and phrases (*the foot of a hill* = *a falda do monte*, *up the hill* = *no alto do monte*).

³ ‘*Hilled*’ is an adjectival form derived from ‘*hill*’ that can be found in several bilingual dictionaries, though it is probably a rarely used word in English other than as a bound adjective. Similarly, ‘*hill-side*’ is rather rare amongst derived forms and is generally found as ‘*hillside*’.

hill = monte, outeiro, collina, eminencia; *The top, the foot of a ~*, o cume, a falda do monte; *up ~*, ladeira acima, subindo; *down ~*, ladeira abaixo, descendo; *up the ~*, no alto do monte; *to go up a-*, subir uma encosta; *up ~ and down dale*, por montes e valles.

hill-side = encosta, declive, ladeira

hill-slope = o declive do monte

hill-top = o cume do monte

hilled = que tem montes, que tem collinas; *in seven ~*, que tem sete colinas.

hilliness = o estado de ser montanhoso

hillock = outeirinho, cerro, collina, eminencia

hilly = montanhoso, cheio de montes

[Bensabat]

In this dictionary, *encosta* is no longer an equivalent of 'hill' – it is reserved for *hill-side*, but it still appears in the translation of the expression *to go up a hill* = subir uma encosta.

According to Verdelho (2011: 59), though Bensabat's dictionary had no further editions, it was quite influential for the subsequent lexicographic projects. That is the case of [DdP 1885], as the entry 'hill' well demonstrates. In this dictionary, *monte* is, again, the first equivalent, followed by *colina* and *eminência*, also present in [Lacerda 1866] and [Bensabat]. This dictionary eliminates *outeiro* (though the diminutive *outeirinho* is listed as the equivalent of *hillock*), which may indicate a more acute sensitivity to language use, and it keeps *encosta* out of the list of equivalents, though equally present in the translation of *hill-side* and *to go up a hill*.

hill = monte, collina, eminencia; *The top, the foot of a hill* o cume, a falda do monte; *up hill* ladeira acima; *down hill* ladeira abaixo; *up the hill* no alto do monte; *to go up a hill* subir uma encosta; *up hill and down dale*, por montes e valles; *hill-side* encosta; *hill-slope* o declive do monte.

hilled, hilly = que tem collinas; montanhoso

hilliness = estado do que é montanhoso

hillock = outeirinho

[DdP 1885]

The first [Michaëlis] dictionary that we were able to locate dates from 1908. It presents just one equivalent, i.e. *outeiro*, like the early editions of Vieyra. This

may be a good example of lack of native language proficiency. Though some later editions are presented as updated versions, this entry will remain untouched until 1945.

hill = outeiro; *up hill* = ladeira acima; *down hill* = ladeira abaixo.

hilled = colinoso; *the seven hilled city*, a cidade das sete colinas, Roma.

hillock = outeirinho

hilly = cheio de outeiro

(MICHAELIS 1908)

hill = outeiro; *up hill* = ladeira acima; *down hill* = ladeira abaixo.

hilled = colinoso; *the seven hilled city*, a cidade das sete colinas, Roma.

hillock = outeirinho

hillside = ladeira

hilltop = cume de outeiro

hilly = cheio de outeiro

[Michaëlis 1922, 1932 and Michaëlis 1945]

In the turn of the 19th century to the 20th and in the early 20th century, the lexicographic activity is very low. Many publishing companies were located in Rio de Janeiro, and many dictionaries from that time were addressed to both sets of users: Portuguese and Brazilian. It was a commercial strategy. This kind of marketing was meant to please the increasingly important Brazilian market, but the vocabulary was dominantly from European Portuguese. In fact, the production of monolingual dictionaries taking the Brazilian Portuguese specificity into account only starts in the 1930s (cf. Nunes 2002, Carmo 2015). A history of the Brazilian bilingual dictionaries is yet to be told, but it was probably initiated in the 1950s, and even those reveal a certain respect for tradition, in the sense that they tended to preserve the equivalents that were adopted in the 18th century.

Close to the edge of the second half of the 20th century, Leonel & Lino Vallandro published a well-accepted dictionary in Brazil – it was republished at least 9 times until 1979. Though this is a dictionary produced at the moment where Brazilian lexicography was gaining some autonomy, it is still quite close to the preceding dictionaries. Nevertheless, this is the first dictionary that includes

morro as a possible equivalent for ‘*hill*’. From the 1980’s onwards, [Houaiss, 1982] shared the Brazilian market with the [Vallandro] and [Michaëlis] dictionaries. Though the English-Portuguese Webster was authored by Antônio Houaiss, a Brazilian prominent lexicographer, it shows a bigger concern with an uncritical accumulation of equivalents, rather than the scrutiny of the Brazilian Portuguese variety. In fact, by that time, *morro* was already the most frequent Brazilian Portuguese equivalent to ‘*hill*’, but [Houaiss, 1982]’s list of equivalents puts it the third position. Conversely, *colina* was and still is a rarely used word in Brazilian Portuguese, but it heads the list of ‘*hill*’ equivalents in this dictionary.

hill = colina, outeiro, morro, cêrro; montículo, cômoro
hillbilly = sertanejo ou montanhês do Sul dos Estados Unidos
hillman = habitante das colinas, montanhês
hillock = pequena colina, outeiro, cômoro, montículo. Der.: *hillocky*
hillside = encosta, vertente (de colina)
hilltop = cimo, cume, cabeço de colina
hilly = colinoso, montanhoso; íngreme, escarpado. Der.: *hilliness*
[Vallandro]

hill = colina, outeiro, morro, monte; montículo
hill-billy, hillbilly = (coloquial pejorativo EUA) montanhês ou camponês (esp. do sul), matuto, caipira, tabaréu; relativo a esse montanhês
hilliness = natureza montanhosa ou acidentada
hillman = habitante das colinas, montanhês
hillock = outeiro, pequena colina
hillside = encosta
hilltop = cume, topo de uma colina, cimo
hilly = 1 montanhoso 2 íngreme, escarpado
[Houaiss, 1982]

hill = 1 morro, outeiro, colina 2 monte (de terra) || **hill up and down dale** morro acima, morro abaixo.
hillbilly = rústico, das montanhas
hillclimb = passeio nas montanhas
hilliness = natureza montanhosa
hillock = morro pequeno, outeirinho

hillside = ladeira, declive

hilltop = cume de morro

hilly = 1 montanhoso, cheio de morros 2 semelhante a morro, íngreme

[Novo Michaëlis]

The acknowledgement of *morro* as the most frequently used equivalent for 'hill' in Brazilian Portuguese arrives with the more recent versions of Michaelis, as well as in the currently available online edition. These dictionaries reveal a stronger concern of adequacy: not only is *morro* finally listed at the top of *hill* equivalents, but it is also true that the online Michaelis suppressed *outeiro*. Nothing is said about the status of *colina* in Brazilian Portuguese.

hill = 1 morro, colina 2 monte de terra

hillbilly = rústico, caipira, bicho do mato

hillclimb = corrida para carros ou motos na qual os participantes sobem morros e colinas.

[Michaëlis 2018]

In Portugal, the bilingual dictionary publishing niche has been taken by Porto Editora since the mid 20th century. They have no serious competitors and the online segment also belongs to the same company under the name of [INFOPEDIA]. This is why European Portuguese is only represented by these two items.

hill = [1] colina, monte, outeiro; encosta, ladeira [...]

hilliness = carácter acidentado (de qualquer região)

hilling = acção de amontoar; aterro

hillock = montículo, outeiro, montão de terra

hilly = acidentado; montanhoso

[Morais]

hill = 1 colina; outeiro; monte 2 encosta, ladeira

hill country = região montanhosa

over hill and dale = por montes e vales

hillbilly = (depreciativo) rústico, saloio, parolo

hilliness = carácter acidentado (de qualquer região)

hilling = acção de amontoar; aterro

hillman = montanhês; serrano, habitante das montanhas

hillock = montículo, outeiro; montão de terra

hilly = [1] acidentado [2] montanhoso
[INFOPEDIA]

It is obvious that these dictionaries ignore the Brazilian preference for *morro*, and they both elect *colina* as the first equivalent. As to the other two equivalents (i.e. *monte* and *outeiro*), the less recent paper edition seems to be more updated with respect to the word usage than the online edition.

The online *Cambridge Dictionary* deserves a final mention. The information offered by the online English-Portuguese is scarce, but somehow more interestingly presented. Though similar in this case, British English and American English phonetic information is given, both with IPA transcriptions and audios. Another interesting feature in this dictionary is the distinction between the meaning of the word (i.e. ‘a high area of land that is smaller than a mountain’) and the equivalents (i.e. *colina*, *morro*), although no usage label distinguishing European and South American use is offered.

hill = noun UK /hɪl/ US /hɪl/

A2 a high area of land that is smaller than a mountain; *colina*, *morro*
[CDO]

This is of course, insufficient information, but the lexicographic model seems more attentive than other similar tools, such as [Linguee] or [Wordreference].

The screenshot shows the Linguee website interface. At the top, there is a search bar with the word "hill" entered. Below the search bar, the dictionary entry for "hill" is displayed. The entry includes the word "hill" with its part of speech "noun" and plural form "hills". It lists several Portuguese equivalents: "montanha" (f), "colina" (f), "monte" (m), "encosta" (f), "cerro" (m), "elevação" (f), and "outeiro" (m). A note under "colina" provides an example: "The village was located in a valley surrounded by hills." and its Portuguese translation: "A vila estava localizada em um vale cercado por colinas." Below the main entry, there is an "Examples" section with several phrases and their translations. The footer of the page indicates "© Linguee Dictionary, 2018".

hill  LISTEN: : /hɪl/

definição em inglês | em espanhol | Sinónimos em inglês | colocação de palavras em inglês | em contexto | imagens

WordReference English-Portuguese Dictionary © 2018:

Traduções principais

Inglês		Português
hill <i>n</i>	(geography)	colina <i>sf</i>
	She stood on a hill and looked down on the town. Ela parou na colina e olhou para a cidade.	
hill <i>n</i>	(slope)	morro <i>sm</i>
	He walked up the long hill to the town. Ele subiu o longo morro até a cidade.	

Traduções complementares

Inglês		Português
hill <i>n</i>	(mound, heap)	monte <i>sm</i>
	They made a small hill inside the stockade as a lookout post. Eles fizeram um pequeno monte dentro da cerca como posto de observação.	
hill <i>n</i>	(gardening: raised area)	monte <i>sm</i>
	Plant 4-6 seeds in each hill. Plante de 4 a 5 sementes em cada monte.	
hill <i>n</i>	<i>slang</i> (baseball: pitcher's mound)	montinho do (beisebol) arremessador <i>loc sm</i>
	The new pitcher strode out to the hill.	

Está faltando alguma coisa importante? Notifique-nos a respeito de erros ou sugestões para que possamos aprimorar o nosso sistema.

	<i>monte</i>	<i>outeiro</i>	<i>colina</i>	<i>morro</i>	<i>encosta</i>	<i>other</i>
A. J. (1701)	1 st					----
Vieyra (1773-1850)		1 st				----
Vieyra (1860)	2 nd	1 st				<i>pico</i>
Lacerda (1866)	3 rd (pequeno _)	9 th	6 th		8 th	<i>eminencia, elevação, montículo, altura, cerro</i>
Valdez (1875)		2 nd	1 st		3 rd	<i>eminencia</i>
Bensabat (1880)	1 st	2 nd	3 rd			<i>eminencia</i>
Dicionário do Povo (1885)	1 st		2 nd			<i>eminencia</i>
Michaëlis (1908, 22, 32, 45)		1 st				-----
Vallandro (1956)		2 nd	1 st	3 rd		<i>cêrro, montículo, cômorro</i>
Porto Editora (1966)	2 nd (_ de terra)	3 rd	1 st		4 th	<i>ladeira</i>
Webster-Houaiss (1982)	4 th	2 nd	1 st	3 rd		<i>montículo</i>
Michaëlis (1986)	4 th (_ de terra)	2 nd	3 rd	1 st		----
Michaëlis (online)	3 rd (_ de terra)		2 nd	1 st		----
[INFOPEDIA]	3 rd	2 nd	1 st		4 th	<i>ladeira</i>
Cambridge			1 st	2 nd		----

The previous table displays the Portuguese equivalents of ‘hill’ that we have found in the above-mentioned dictionaries. The numbers indicate the order of appearance of each Portuguese equivalent. Some of them have been excluded, either because they are very specific in time and motivation (cf. *eminencia*, *elevação*, *altura*), or just because they occur in a small number of dictionaries (e.g. *pico*, *cômodo*, *cerro*, *ladeira*). The diminutive *montículo* that occurs in [Lacerda 1866] and [Vallandro] might be interesting because it conveys information about size, but the word has disappeared from recent dictionaries.

Outeiro is by far the most constant equivalent for ‘hill’ – it is only absent in the very first dictionary and in the [DdP], and though it has been downgraded in the order of appearance, only [Lacerda 1866] and [Morais] have seriously marked the disfavour. *Colina* was introduced in the late 19th century and it assumed a protagonism that all [Michaëlis] failed to acknowledge. Curiously, this same dictionary assigns the first position in this rank to *morro*, which is only offered as an equivalent by dictionaries produced in Brazil. Finally, there is *monte*. Only [A.J.], [Bensabat] and [DdP 1885] present it as the best equivalent for *hill*. [Lacerda 1866] lists it in 3rd position, but the previous two (i.e. *eminencia*, *elevação*) are part of the ‘excentric’ definitions. It has lost the status of preferred equivalent, but it is frequently used in the definitions of *hill* derivatives, compounds and phrases, particularly those that are not addressed to Brazilian users.

Thus, the most relevant words, those that deserve further consideration, are *monte*, *outeiro*, *colina*, *morro* and *encosta*. The first four, i.e. *monte*, *outeiro*, *colina* and *morro* are roughly synonymous. So, why are they all always (or almost always) present in the list of equivalents for ‘hill’? The fifth, *encosta*, despite being part of the list of equivalents, is semantically distinct from the other four. So, why is it sometimes included?

The solutions presented by the English-Portuguese dictionaries present a random set of equivalents, not always coherent, even within the same work, which makes us wonder if bilingual dictionaries are really the best choice to find the Portuguese word equivalents, namely for ‘hill’. Among other reasons, these inconsistencies have motivated some further research in monolingual dictionaries,

in order to find out to what extent the information in bilingual and monolingual dictionaries intersect or disagree. We have also reported the distinct path that certain words have taken in European and Brazilian Portuguese.

Encosta

Encosta appears for the first time in [Lacerda 1866], which was, as we saw above, influenced by a foreign English to French dictionary. Apparently, *encosta* corresponds to the French *coteau*, but why has the [Fleming & Tibbins] registered this meaning for ‘*hill*’? As far as we know, until the mid 20th century, English monolingual dictionaries, such as [Johnson], [Webster 1951], [CODCE 1919] or [Collins], have not registered ‘slope’ or ‘inclination’ as meanings for ‘*hill*’, and perhaps it doesn’t have those meanings. This issue will deserve further inquiry, but the appearance of this meaning in some English dictionaries, even if it is wrong, explain why the early English-Portuguese dictionaries have not included the ‘slope’ meaning, and why it was later introduced. Anyway, even if *encosta* is presented as a possible equivalent for ‘*hill*’, it will never be translated into *hill*, as the [INFOPEDIA] entries illustrate.

encosta = slope; hillside

ladeira = 1 (encosta) hillside 2 (declive) slope

[INFOPEDIA P-1]

So, apparently, ‘*hill*’ has undergone a semantic change in English that is documented in English dictionaries later than in bilingual dictionaries (English-Portuguese after the English-French model).

So, although it often shows up as an equivalent of ‘*hill*’, *encosta* has a different semantic status in Portuguese. This is a fairly new word in the Portuguese lexicon – its first register dates from the 18th century, with the meaning ‘slope’ (‘declive, rampa’). It becomes a dictionary entry in 1831, with the 4th edition of Morais. *Encosta* is a deverbal noun (from *encostar*), which is obtained by conversion. The base verb is a derivative from *costa*, a noun that evolved from the similar Latin etymon *costa, ae*, which meant ‘rib’ or ‘side’. A similar meaning can be

found in the Portuguese word *costa* that means ‘coast’, and *costas* that means ‘back (of the body)’, but *costa* is listed since [Cardoso] as a synonym of *ladeira* ‘slope’. In the mid 20th century, *encosta* replaces *costa* in the contexts that refer the inclination of a *hill* (*monte, colina, outeiro* or *montanha*), as we can see in these excerpts of monolingual Portuguese dictionaries before and after [Morais 1813] and [Morais 1831].

Encosta has preserved the meaning of declivity of any elevated land and it acquired a new one by extension that applies to the declivity of any surface (i.e. *rampa*), but it has never hosted the meaning of ‘elevation of the land’, which is proper to *monte, colina* and all the other possibilities. In the bilingual dictionaries, *costa* is used by [Vieira] in definitions (cf. *the side of a hill* = a *costa* ou *ladeira* do *monte*) and *encosta* is used thereafter, namely, as we have seen, after [Lacerda, 1866]. *Costa* and *encosta* were used for the same purpose, but the update is successfully transferred from monolinguals to bilinguals.

ENCOSTA < Latin *costa,ae* ‘rib, side’

[Cardoso] (1562-70)	Cluius(i) = Accliuitas(atís). A <i>costa</i> . /Cluius(i). A <i>costa</i> ou <i>ladeyra</i> .
[Barbosa] (1611)	costa de monte = Clivus, I Subida, i. <i>costa</i> arriba
[Pereira] (1697)	clivus, i = m. g.(Clivum,i,n.g. Nonius). A <i>costa</i> , ou <i>ladeira</i> do <i>monte</i> /Declivitas, atís, f. g. A <i>inclinação</i> , <i>costa</i> do <i>monte</i> , a <i>descida</i> , <i>ladeira</i> a <i>baxo</i>
[Bluteau] (1712-28)	costa do mar = (assi chamada, porque de ordinario he montuosa, & costumamos dizer, A <i>costa</i> do <i>monte</i> ; ou porque a terra junto ao mar de ordinario he curva a modo de <i>costel</i> .) ‘ <i>Costa</i> do <i>monte</i> . Para <i>baxo</i> . Declivitas, atís. Fem. Cic. ou Montis declive fastigium. § <i>Costa</i> arriba. Acclivitas, atís. Fem. Caes. Huma, & outra palavra pode indifferentemente significar a <i>costa</i> do <i>monte</i> . A <i>costa</i> do <i>outeyro</i> . A parte, que fica por detraz. [...]’
[Morais 1813]	costa = Terreno, que se vái erguendo, e fazendo <i>ladeira</i>
[Moraes 1831]	encosta = terreno declive de um <i>monte</i>
[Figueiredo] (1913)	encosta = declive, <i>rampa</i> , <i>vertente</i>
[Morais 1949-58]	encosta = declive dum <i>monte</i> ou <i>colina</i> ; <i>rampa</i> , <i>ladeira</i>
[Houaiss 2001]	<i>encosta</i> = <i>vertente</i> (no sentido de declive) <i>vertente</i> = declive de <i>montanha</i> ; <i>encosta</i> , <i>tombada</i> , <i>quebra</i>
[INFOPEIDIA] (2018)	<i>encosta</i> = 1 declive de um <i>monte</i> 2 <i>rampa</i> , <i>ladeira</i>

OUTEIRO

Outeiro originates in a Latin word (i.e. *altarium*), to which [Lewis & Short] assign two meanings that can roughly be reduced to ‘altar’:

1. *That which was placed upon the altar proper (ara) for the burning of the victim*
2. *a high altar (built and ornamented with more splendor than the ara)*

It is used in Portuguese since at least the 13th century, and it has been dictionarised since the very beginning. It has always meant ‘a natural elevation of the earth’s surface’, but it is mostly used in religious texts and toponymy, probably under the influence of the semantics of the etymon in Latin. In Portugal, it can easily be found in street names, city districts and small villages, and in Brazil there is at least one famous location, called *Outeiro da Glória*, where a small 18th century chapel, often portrayed in paintings, photos and in literary texts, stands. Out of these contexts (religious and toponymic), *outeiro* is a rarely used word, as we will see in a moment.

OUTEIRO < Latin *altarium* ‘altar’ < *altus* ‘high’

[Cardoso] (1562-70)	collis(is) = Ho outeyro.
[Barbosa] (1611)	outeyro = Collis, is, g. m. Outeyrinho. Colliculus, i, pen. [...]. 1. Cousa de outeyro. Collinus, a, um, penult. prod. adiectivum. Ut, Collina vinea, collina vina, Columel. lib. 12. cap. 21.
[Pereira] (1697)	[oiteiro] not an entry
[Bluteau] (1712-28)	outeiro = Lombo de terra, que se levanta da planície, & faz hum alto donde se descobre campo. Os que investigãrão a etymologia de outeyro, querem que se derive do Grego Optomai, que quer dizer vejo; & na lingua Castelhana Otear he olhar de lugar alto para o campo. Collis, is. Masc Cic. O Conde da Ericeyra, em varios lugares do seu Portugal Restaurado, diz Collina, em lugar de Outeyro. Vid. Collina.
[Morais 1813]	O alto do monte, os altos ou outeiros
[Figueiredo] (1913)	oiteiro = Pequeno monte. Colina.
[Morais 1949-58]	outeiro = pequena elevação de terra firme, pequeno monte, colina
[Houaiss 2001]	outeiro = pequena elevação de terreno; colina, monte
[INFOPEDIA] (2018)	outeiro = pequena elevação de terreno; oiteiro

MONTE

Monte is also a word of Latin origin (i.e. *mons*, *-tis*), to which [Lewis & Short] assign the meaning ‘mountain, mount, range of mountains’. It is attested in Portuguese at least since 1255 and, like *outeiro*, it is also dictionarised since the 16th century. Semantically, it is a quite steady word, since it has always meant an elevation of the earth, but its relationship with the other words, namely *outeiro*, *colina* and *morro*, is less easily understandable.

MONTE < Latin *mons* ‘a mountain, mount, range of mountains’

[Cardoso] (1562-70)	mons(tis) = / Monticulus(i). dimin. Ho monte.
[Barbosa] (1611)	mons, montis = g. m. Cousa de monte. Montanus, a, um,
[Pereira] (1697)	mons, ontis = Monte, id est, cumulo [...] (Monticellus. Mosculus. Mosilus. Moscellus,) i, m. g. dim. O pequeno monte, outeirinho
[Bluteau] (1712-28)	monte = Terra, ou penedia muito mais alta, que o nível ordinario da terra.
[Morais 1813]	monte = Porção, ou parte da terra, notavelmente levantada do olivel da outra que a rodeia
[Figueiredo] (1913)	monte = Grande massa de terra e de rocha, elevada acima do terreno que a rodeia.
[Morais 1949-58]	monte = terreno acima do solo que o rodeia
[Houaiss 2001]	monte = parte de uma superfície que se eleva em relação ao espaço circundante; morro
[INFOPEDIA] (2018)	monte = elevação de terreno acima do solo circunjacente, menos extensa e menos alta do que a montanha

Monte is probably the best candidate to be the generic term to name an elevation of the earth, generally used to name any elevation. There are hundreds of *montes* in biblical texts and other literary or geographic documents, since the Portuguese translations never make use of the other words:

<i>monte Olimpo</i>	‘Mount Olympus’
<i>monte Sinai</i>	‘Mount Sinai’
<i>monte das Oliveiras</i>	‘Mount of Olives’
<i>monte Sião</i>	‘Mount Zion’
<i>monte Everest</i>	‘Mount Everest’
<i>monte Cervino</i>	‘Matterhorn’
<i>monte Branco</i>	‘Mont Blanc’

In Portugal and Brazil, *monte*, or a clip of the word in a compound, is quite frequent in toponymy:

Sobral de Monte Agraço

Belmonte

Montemor

Montejunto

Monsanto

Montachique

Montes Claros

Monte Carmelo

Santo Antônio do Monte

Itamonte

Montenegro

But, in fact, *monte* is not exactly the generic term. Nowadays, the usage preferences show that European Portuguese favours the word *colina*, and in Brazilian Portuguese the prominent word is *morro*.

COLINA

Colina originates in a Latin adjective, which is a derivative from *collis* 'hill'. In Ancient Rome, *collina* was the name of one of its doors, the *Porta Collina*, stage of an important battle in 82 bC. In Portuguese, *colina* is a 'recent' neoclassical introduction that primarily meant 'vineyard' and then 'hill'. Why did it become more popular than *outeiro* or *monte*?

There is a tempting non-linguistic explanation. The existence of seven hills, in Lisbon, is the invention of a friar, Frei Nicolau de Oliveira, who wrote a book entitled *Livro das Grandezas de Lisboa*, published in 1620:

as sete colinas sobre as quais estava assente Lisboa: São Jorge, São Vicente, São Roque, Santo André, Santa Catarina, Chagas e Sant'Ana

Apparently, the roman conquerors found a similarity between Lisbon's landscape and the topography of Rome. The seven hills that surround the city of Rome (Camidoglio, Quirinale, Viminale, Esquilino, Celio, Aventino and Palatino)

served as inspiration to set the same amount for Lisbon, or, at least, that was the persuasion of Frei Nicolau de Oliveira. In fact, the topography of Lisbon has changed over the centuries, and some hills have fallen, due to the effect of earthquakes. The *Pico de Belveder*, for instance, which was a village outside Lisbon, fell in 1597, and two hills separated by a valley emerged at the same location. The valley, now called *Bica*, was then urbanised and the new hills (named *Santa Catarina* and *Chagas*) were integrated in the city. Geographers confirm that the claim of the existence of seven hills in Lisbon is very fragile, but the image persevered, attached to the latin word *colina*, and it was endorsed by marketing for touristic purposes.

Another detail in these monolingual entries is worth a reference. [Figueiredo] and [Moraes 1949-58], unlike all the other dictionary authors, have included *encosta* in the definition of *colina*. This is quite unexpected and hard to understand, but these particular dictionaries tend to accumulate meanings that are not attested in the usage of the language. This must be the case here, since they do not provide any examples for this meaning, and we may deduce that they were inserted here somehow artificially. Anyway, we may wonder if these meanings were suggested by influence of any bilingual dictionary, following the same semantic extension that 'hill' has undergone in English.

COLINA < Latin *collinus*, *a, um* 'of or pertaining to a hill, found or growing on a hill, hilly'

[Pereira] (1697)	collina , ae = f. g. Vinha em outeiro; item, outeiro: Collina, porta de Roma
[Bluteau] (1712-28)	colina , ou collina = Outeiro. Collis, is. Masc. Cic. Derivase do Grego Colonos, que he Eminencia, Altura. { Fez alto de traz de huma Colina, donde as tropas ficavao cubertas. Port. Restaur. part. I. pag. 225. } { As cinco da madrugada começou o inimigo a baxar da quellas Colinas. Campanha de Portug. do anno de 1663. pag. 36. } Vid. Outeiro. § Colina. (Termo de pescadores, & homens do mar) He huma cortiça muyto grande amarrada em córda, por onde se conhece, & se há agoagem, & se está quiéta, está a agoa branda. collina , ou colina = Deu a Gentilidade Romana este nome aos outeiros em honra da fabulosa Deóza Collina, que presidia a todos os outeiros. Della faz menção S. Agostinho no livro da Cidade de Deos. Collis, is. Masc. Vid. Outeiro. Vid. Colina. § Collina tambem era o nome de huma das quatro partes, em que antigamente se dividia a Cidade de Roma [...]. Tambem a huma das portas de Roma, perto do dito bairro das Collinas, se deu o nome de Collina.

[Morais 1813]	collina = outeiro
[Figueiredo] (1913)	colina = pequena montanha, oiteiro; encosta.
[Morais 1949-58]	colina = 1. outeiro, cole, pequeno monte 2. encosta
[Houaiss 2001]	colina = pequena elevação de terreno com declive suave e menos de 50m de altitude
[INFOPEDIA] (2018)	colina = pequena elevação de terreno; outeiro

MORRO

Finally, according to the [DCECH], the origin of *morro* is uncertain, though the word is used in several European languages (Portuguese, Castilian, Catalan, Sardinian, French, Italian, German dialects). Its first attestation dates from 1591. The [DCECH] defines the Portuguese *morro* as a ‘hill’: ‘monte o peñasco saliente pero de punta chata’. But he admits that it evolved from an Iberian+Languedoc onomatopoeic form *murr-*, from the sounds produced by someone grumbling, and used to name an ugly, angry face (cf. “probablemente empezó designando los labios abultados del malhumorado que ‘pone hocico’). Still according to [DCECH], the Góngora’s 1613 Castilian translation of Percival’s sentence: “a great high rock in the sea; also the poll of the head” is ‘alta alta cumbre de aquel morro difícil... esotro escollo al mar pendiente’. Therefore, *morro* translates *high rock*.

According to [Bluteau], *morro* is indeed a hard soil, like a rock. Maybe this is why one of its meanings is ‘a big rock’ (cf. [Houaiss 2001]) and another one is *pedreira* ‘quarry’ (cf. [Figueiredo], [Morais 1949-1958] & [INFOPEDIA]). However, the dominant meaning is ‘small hill’ since [Morais 1813]. [Bluteau] refers to a big elevation in India, called *Morro de Chaul*, translated in Wikipedia as a “rocky promontory” (en.wikipedia.org/wiki/Chaul).

The use of the word was intensified in Brazil, at the end of the 19th century, but it is not clear why and the subject requires further thorough inquiry. [Valdez A] lists it for the first time and translates it as a “declivity, slope; a little hill.”

MORRO (uncertain origin)

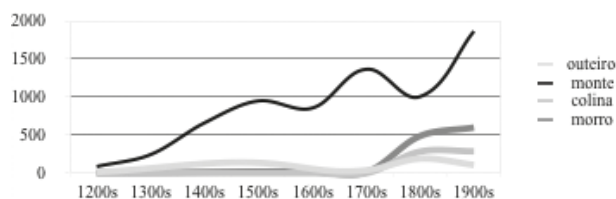
[Bluteau] (1712-28)	morro = Os que fazem vallados chamão Morro à terra, que topão dura, a modo de piçarra, ou rocha. Na sua{ Historia da Ethiopia Alta, pag. 33. col. 1. o Padre Balthazar Telles,} fallando em hũa serra, ou rocha perpetua, que representa hum altissimo, & fortissimo baluarte, que terà de roda meya legoa, lhe chama Morro, & diz,{(Terà este morro atè trezentas braças de alto.)) O Morro de Chaul, he o nome de huma famosa fortaleza da Índia, que os Mouros de Melique fizerão defronte da Cidade de Chaul, da outra parte do rio, na ponta da terra, à entrada da barra em hũa serra muito alta, & fragosa, a que tambem chamão Morro. [...]
[Morais 1813]	morro = terra dura a modo de piçarra. Monte não mui alto
[Figueiredo] (1913)	morro = Monte, pouco elevado. Oiteiro. Pedreira.
[Morais 1949-58]	morro = 1 pequena elevação de terreno firme, monte pequeno , outeiro 2 pedreira 3 bloco
[Houaiss 2001]	morro = 1 pequena elevação em uma planície; monte de poucas dimensões; colina, outeiro 2 pedra rija e saliente; pedreira. 3 B. favela (conjunto de habitações populares)
[INFOPEDIA] (2018)	morro = 1 monte de pouca altura; monte, cabeço, colina 2 pedreira. 3 (Brasil) ver favela.

Summary and outlook

In sum, the observation of the translation from ‘hill’ into Portuguese demonstrates the existence of a gap between dictionaries and usage. A search performed in *Corpus do Português* allows us to illustrate the usage contrasts. The results are presented in the following diagram.

The use of *outeiro*, which is the first in most equivalent lists, or at least, one of its members, is in decline since the mid 18th century; *colina* (the green line), which is frequently the second collocata in the bilingual entries, is also non-dominant in this corpus; conversely, *morro* (the purple line) seems to increase its presence in the language use, as well as *monte* (the red line), that seems to recover from a downsizing period that coincides with the ascent of *colina* and *morro*. The predominance of *monte* must, however, be partially assigned to its polysemic character: *monte* is also a quantifier (*monte* = big quantity, pile)¹.

¹ These results do not include the word form *monte* as a member of the inflectional paradigm of the verb *montar* ‘to assemble’, nor *morro* as a form of the verb *morrer* ‘to die’.



corpusdoportugues	1200s	1300s	1400s	1500s	1600s	1700s	1800s	1900s
outeiro	15	40	119	136	56	37	191	109
monte	87	244	660	949	855	1364	1005	1864
colina	0	0	1	0	1	0	283	287
morro	3	1	2	32	19	13	487	599

This table clearly demonstrates the need to consider diachronic information, for instance, in the case of *outeiro*. The doughnut chart illustrates the need to also consider diatopic information, though this corpus is yet insufficiently annotated.



So, what can we expect from bilingual dictionaries? Certainly much more than what they presently offer us. Diachronic contrasts must be taken into consideration. *Outeiro*, for instance, may not be an equivalent for 'hill' in a contemporary English-Portuguese dictionary, though it may be mentioned as an unused equivalent. Furthermore, languages such as Portuguese and English, that have important national varieties, need to incorporate that information, and need to offer the specific information for each variety, whenever applicable. But for lexicologists, bilingual dictionaries have a much more relevant role, since they offer a very interesting array of semantic reasoning that may be absent from monolingual dictionaries.

IV. What do lexicographers need to know about plant names?

Semantic Motivation of Plant Names as a Part of their Etymology

Przemysław Dębowski & Jadwiga Waniakowa

As is generally known, etymology is the settlement of the origin of words. The essence of etymological research is both a reconstruction of the original form of the word (its root), and its original – etymological – meaning. Let us quote here the sentence written by Wiesław Boryś, author of the first full Polish etymological dictionary: “The task of etymological research is to reproduce the original motivation of the given word (indication of its immediate derivative basis), to detect and explain its structure, to indicate word-formation morphemes and to reproduce its supposed primary meaning and explain its further semantic development” (Boryś SEJP: 5). Thus, the etymology includes, besides reaching the original form, the presentation of its semantic motivation and the semantic development of the given word. None of these elements of reconstruction can dominate and none can be omitted either. Franciszek Sławski, eminent Polish Slavicist, even claims that “the reconstruction of the motivation should be considered as the basic goal of etymology” (Sławski 1998: 4).

A number of studies have been dedicated to the question of semantic motivation in etymology; see, for instance, Siatkowski (1989), Varbot (1997: 35), Tolstaja (2008: 188–190) and Jakubowicz (2010: 29–33). However, a detailed

discussion of problems related to this issue is beyond the scope of this paper. Let us just refer to Waniakowa's book (2012: 66–67) where she defines the semantic motivation as a nominating mechanism, which triggers a new meaning (see also Jakubowicz 2010: 32).

In the case of plant names, especially non-scientific ones, this new meaning is frequently based on connotative properties, associated with particular genera or species of plants. This motivation should be expanded to include affective and evaluative factors with reference to historical and dialectal phytonyms.

A good knowledge of various aspects connected with plants is needed to investigate the semantic motivation of plant names. One of the prerequisites is an appropriate cognizance of botany, involving in particular the identification of plants and their typical features, such as general appearance, shape and appearance of leaves, colour and shape of flowers, fragrance, blossoming period and potential healing properties. Another key factor is learning about the usage of plants in the countryside. This may include healing properties, alleged magical properties, customs associated with plants, beliefs and legends. It is related to the researcher's knowledge of how a plant was perceived and used in the past (including antiquity), because one can often encounter old names. Only a proper erudition connected with all these aspects can guarantee a correct reconstruction of the semantic motivation of plant names (Waniakowa 2012: 67).

According to scholars (see e.g. Tokarski 1993: 340–341), properties of plants which are the most important for a human being can be classified into three groups:

- environmental characteristics (including the blossoming period, as the most significant for the development of the plant, and harvest time),
- physical properties,
- functional properties (usage of the plant).

Researchers studying dialectal plant names, such as Pelcowa (2001: 100), underline the belief in extraordinary – evil or good – powers of selected plants and legends associated with them play an important role in the process of naming

plants. This includes religious references and superstitions, but various symbolic connotations are important too.

In this chapter, we will present a typology of possible semantic motivations for plant naming in various European languages and their dialects.

Semantic motivations for plant names

Taking into consideration the above-mentioned criteria of semantic classification of names enumerated by researchers studying historical and dialectal plant names, we can present the following general motivational mechanisms to establish the basis of the semantic motivation of names in the process of nomination:

- the appearance of the plant;
- the place of its occurrence;
- the properties of the plant;
- its usage;
- other motivations typical of a specific genus or species¹.

Each of these factors can influence plant names.

It is obvious that each of these general motivations involves a range of detailed ones (Waniakowa 2012: 67–68). It should also be noted that a large number of phytonyms refer to at least two properties of “given” species, for instance to the appearance and the place of occurrence, especially since many of the names are two-word compounds. Metaphorical plant names, which are also abundant in botanical nomenclature, represent a separate issue. They comprise secondary names, so in each case the basis for the metaphor, i.e. its primary motivation, should be deciphered. Secondary names also include names transformed due to an association with another name; this process is often linked to folk etymology. Another group comprises names that have evolved from other plant species based

¹ The commemoration of somebody or the origin of the plant can be this kind of motivation. The latter can be seen, for instance, in the Polish names of sweet flag, *Acorus calamus* L.: *tatarski korzeń* literally ‘Tatar root’, *tatarczuk*, *tatar* and others, as well as the general Polish name *tatarak* ‘Tatar plant’.

on some similarity; and another group is associated with beliefs and legends, but in this case a certain feature of the plant (i.e. given species) constitutes the motivational basis, too (Waniakowa 2012: 72).

Thus we can present four main factors conditioning the semantic classification of plant names, which are the following:

- the appearance of plants,
- the properties of plants,
- the place of occurrence of plants,
- the usage of plants.

The majority of these main motivations are composed of many particular elements.

Plant names connected with the appearance of plants hide a multitude of detailed motivations, for instance: the colour of flowers, the appearance of inflorescences, the shape of flowers, characteristic infructescence, specific seeds (e.g. their colour), characteristic leaves, the shape of leaves, the size of leaves, the colour of leaves, the arrangement of leaves, the shape of the root, the appearance of whole plants and the physical similarity to other plants. It is worth remembering that some species have many names connected with the appearance in different stages of vegetation because they change their look.

Plant names associated with the properties of plants are also very diversified. For example, phytonyms connected with sounds made by plants (e.g. rustling, scraping), specific tactile impressions made by plants (e.g. hair, thorns), characteristic features of flowers, characteristic fruits, specific features of the whole plant, healing properties (e.g. pain-killing, stanching blood, healing wounds), specific vegetative properties (e.g. speed of mellowing), blossoming time, harvest time, smell, chemical reactions caused by plants (e.g. the ability to make foam), characteristic properties of juice, specific taste, negative properties (e.g. poisonous, intoxicant), positive properties (e.g. honey-yielding, milk-producing), supposed magical powers (e.g. apotropaic), positive powers (legends and beliefs) as well as properties characteristic to other species.

The names associated with the usage of plants are significantly less diversified. This group involves names connected with assignment of a species for fodder, names associated with using a species as a medicine and names connected with applying given species in the household. All the above-mentioned features of plants can be the basis of motivation for their names. This is why there are so many (dialectal and historical) names for one species in every language. Each species can have many names motivated by its various features; a given name depends on the feature that was considered as the most important by people who named the species in a given time and place. Taking into consideration the above-mentioned remarks, the following schema (cf. Figure 1) of main factors influencing the semantic classification of plant names can be presented. Subsequently, Table 1 presents main motivations of plant names with some examples of names in various languages:

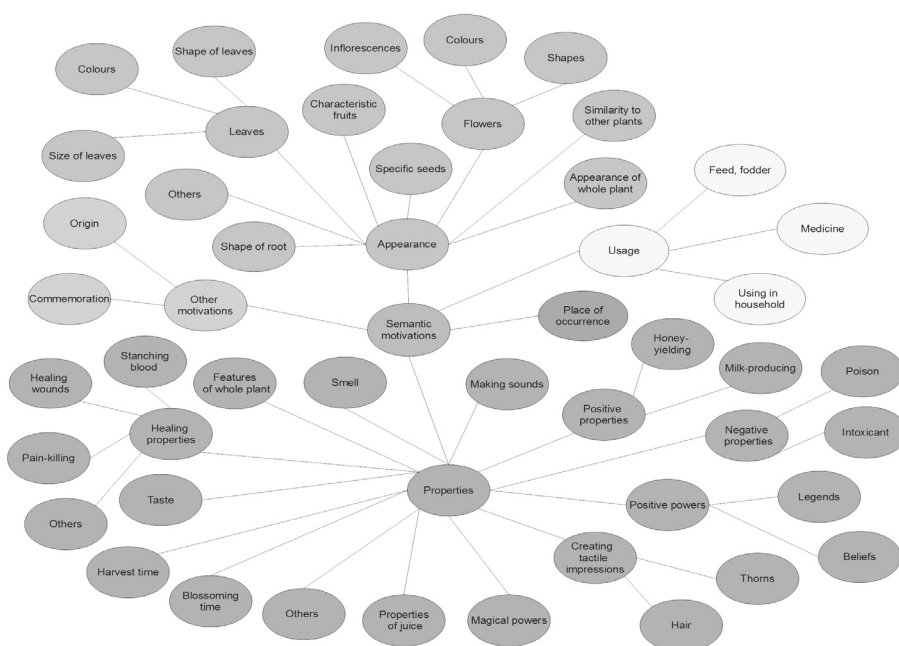


Figure 1. Main factors influencing the semantic classification of plant names

THE APPEARANCE OF THE PLANTS

ASPECT/ PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
colour of flowers	cornflower, Centaurea cyanus L.	Fr. <i>bleuet</i> ; Pol. <i>chaber bławatek</i> ; Pol. dial. <i>bławat</i> ; Slovak <i>blavač</i> (cf. Buffa 1972); Sp. <i>azulejo</i> ; Ukr. dial. <i>bławat</i> (cf. Makowiecki 1936: 86).	These names are derived from adjectives meaning 'blue'.
appearance of inflorescences	mullein, Verbascum	Brus. dial. <i>царская свечка</i> (cf. Kiselevskij 1967); Bulg. dial. <i>царска свещуь</i> (cf. Achtarov 1939); Czech dial. <i>svíce královská</i> (cf. Kosík 1941); Germ. <i>Königskerze</i> ; Pol. dial. <i>królewska świeca</i> ; Port. <i>vela-de-bruxa</i> ; Russ. dial. <i>царская свѣча</i> (cf. Annenkov 1878); Serb. dial. <i>краљевска свића</i> (cf. Simonović BR); Ukr. dial. <i>carska svička</i> (cf. Makowiecki 1936: 394).	All these names mean literally 'king's candle', except the Portuguese one ('hag's candle').
shape of flowers	monk's-hood, Aconitum firmum (Rchb.) Neilr., syn. Aconitum napellus L.	Czech dial. <i>pantoflíčky</i> (cf. Kosík 1941); Fr. dial. <i>pantoufes de Marie</i> (cf. Marzell 2000 I col. 101); Germ. dial. <i>Pantoffeln</i> (cf. Marzell 2000 I col. 102); Pol. dial. <i>pantofelki</i> .	All these names evoke words for 'slippers'.
characteristic infructescence	dandelion, Taraxacum officinale Web.	Croat. dial. <i>puhalica, puhavka</i> (cf. Šugar HBI); Pol. <i>dmuchawiec</i> ; Pol. dial. <i>pępawa</i> ; Slovak <i>púpava</i> .	These names are derived from verbs meaning 'to blow' or 'to swell'.
characteristic leaves	broadleaf plantain, Plantago maior L.	Fr. <i>plantain à cinq nerfs</i> (cf. Marzell 2000 III col. 825); Germ. <i>Fünfadern-Kraut</i> (1738), <i>Fünfadere(n)krut</i> (1852), <i>Fiefaderblatt</i> (1939) (cf. Marzell 2000 III col. 810); Kash. <i>pięciożyłki</i> ; Med. Lat. <i>quinquenervia maior</i> (cf. Symb. I 305-306).	These names evoke five nerves on the broadleaf plantain's leaves.

ASPECT/ PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
shape of leaves	dandelion, Taraxacum officinale Web.	Engl. dial. <i>lion's tooth</i> ; Germ. <i>Löwenzahn</i> ; Med. Lat. <i>dens leonis</i> (13 th century) (cf. Symb. I 341; Marzell 2000 IV col. 601); Old Fr. <i>dent de lion</i> ; Pol. dial. <i>lwi ząb</i> ; Port. <i>dente-de-leão</i> ; Russ. dial. <i>львиный зубъ, львиный</i> <i>зубецъ</i> (cf. Annenkov 1878); Czech dial. <i>lvi zub</i> (cf. Kosík 1941; Rystonová 2007); Slovak dial. <i>levský zub, lvi zubec</i> (cf. Buffa 1972: 389); Sloven. dial. <i>levov zob</i> (cf. Theissen 2005: 211).	All these names mean literally 'lion's tooth'.
colour of leaves	common silverweed (midsummer silver), Potentilla anserina L.	Brus. dial. <i>сребник, срибник,</i> <i>сърэбранік</i> (cf. Kiselevskij 1967; Pastusiak 2007); Czech dial. <i>stříbrník, stříbrníček</i> ; Dutch <i>zilverkruid</i> (cf. Marzell 2000 III col. 1006); Fr. <i>argentine</i> (1581), <i>herbe argentée</i> (cf. Marzell 2000 III col. 1006); Germ. <i>Silberkraut</i> (cf. Marzell 2000 III col. 1006); It. <i>argentina</i> (cf. Marzell 2000 III col. 1006); Med. Lat. <i>argentaria, argentina</i> (cf. Symb. I 193; Marzell 2000 III col. 999); Pol. dial. <i>srebrnik</i> ; Russ. dial. <i>серебрянникъ</i> (cf. Annenkov 1878); Slovak dial. <i>striebník</i> (cf. Machek 1954: 102-103; Čouka 1929; Buffa 1972).	These names refer to 'silver', such as the English one.
shape of the root	snakeroot, Polygonum bistorta L.	Brus. dial. <i>венжоўнік, венжовнікъ</i> (cf. Annenkov 1878; Kiselevskij 1967); Germ. <i>Schlange wurz</i> ; Med. Lat. <i>colubrina, dragantea,</i> <i>dragentea, dragenthea, dragon,</i> <i>dragonthea, draguntea, serpentaria,</i> <i>serpentaria maior, serpentina,</i> <i>serpentina maior, serpentina rubea,</i> <i>viperina, viperana, viperaria, viperina</i> <i>rubea</i> (cf. Symb. I 153; Marzell 2000 III col. 907); Pol. <i>wężownik</i> ; Russ. <i>змеиный корень</i> ; Ukr. dial. <i>užovnyk</i> (cf. Makowiecki 1936: 285).	All these names are derived from words for 'snake' or 'adder'.

ASPECT/ PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
appearance of the whole plant	common knotgrass, Polygonum aviculare L.	Croat. dial. <i>žicara</i> (cf. Šugar HBI); Engl. <i>iron grass</i> (cf. Marzell 2000 III col. 898); Fr. <i>herbe de fer</i> (cf. Marzell 2000 III col. 898); Germ. <i>eisenkrut</i> (15 th century), <i>Eisenkraut, Eisengras</i> (cf. Marzell 2000 III col. 898); Pol. dial. <i>drutowiec</i> .	These names evoke a 'wire' or 'iron'.

PROPERTIES OF THE PLANTS

ASPECT/ PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
making sounds	cabbage thistle, Cirsium oleraceum (L.) Scop.	Brus. dial. <i>хробуст, хрыбуст</i> (cf. Pastusiak 2007); Croat. dial. <i>škrbinka</i> (cf. Šugar HBI); Pol. dial. <i>chrobust</i> (cf. Waniakowa 2012: 96); Ukr. dial. <i>хробуст, хrabust</i> (cf. Makowiecki 1936: 100).	All these names are derived from verbs meaning 'to scrape', 'to rattle'.
creating specific tactile impressions	running clubmoss, Lycopodium clavatum L.	Czech <i>medvědí lapa</i> (cf. Machek 1954: 27); Germ. <i>Bärenlapp</i> (reg. 1741) and others (cf. Marzell 2000 II col. 1477, 1479-1480); Med. Lat. <i>pes ursinus</i> ; Pol. dial. <i>łapa niedźwiedzia</i> (cf. Waniakowa 2012); Slovak dial. <i>medvedi noha, medvedia tlapa</i> (cf. Buffa 1972).	These names mean literally 'bear's paw'.
characteristic features of flowers	dwarf everlast, Helichrysum arenarium (L.) Moench	Czech dial. <i>slaměnka</i> ; Dan. <i>stråblomst</i> (1845, 1850); Dutch <i>stroobloem</i> ; Fr. <i>fleur de paille</i> ; Germ. <i>Sand-Strohblume</i> ; Germ. dial. <i>Strohblaum, Striehloume, Strîhblâm</i> and many others; (cf. Marzell 2000 II col. 783); Lith. <i>šiaudinė, šiaudinėlis, šiaudinikė, šiaudinukas</i> (cf. LKŽ s.v.); Pol. <i>łomianka</i> ; Rom. <i>flori-de-paie</i> (cf. Marzell 2000 II col. 783); Slovak dial. <i>slamiha</i> (cf. Machek 1954: 241); Swed. <i>stråblomster</i> (1877).	All these names are derived from words for 'straw'.

ASPECT/ PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
characteristic fruits	thorn-apple, Datura stramonium L.	Croat. dial. <i>bodeća jabuka</i> (cf. Šugar HBI); Czech <i>jablko trnové, bodlavé jablko</i> (cf. Kosík 1941); Germ. <i>gemeiner Stechapfel</i> ; Pol. dial. <i>jabłko cierniste</i> (cf. Waniakowa 2012); Russ. dial. <i>колюки-яблоку</i> (cf. Annenkov 1878); Serb. dial. <i>бодећа јабука, бодљива јабука</i> (cf. Simonović BR); Slovak <i>ježkové jablko</i> (cf. Machek 1954: 208); Sloven. dial. <i>bodeča jabuka</i> (cf. Karlin 1964).	All these names, including the English one, mean 'pricking apple', 'apple with thorns'.
specific features of the whole plant	running clubmoss, Lycopodium clavatum L.	Czech dial. <i>vlačeha, vláčeha</i> (cf. Kosík 1941; Rystonová 2007); Pol. dial. <i>czołga, włóczęga</i> (cf. Waniakowa 2012); Slovak dial. <i>vlačuha</i> (cf. Buffa 1972).	These names are derived from verbs meaning 'to crawl, to creep'.
healing properties	plantain, Plantago	Czech dial. <i>ranocel</i> (cf. Rystonová 2007); Germ. <i>Wundkraut</i> (cf. Marzell 2000 III col. 830); Kash. <i>gojqce listki</i> (cf. Waniakowa 2012); Pol. dial. <i>ranocel</i> ; Slovak <i>ranocel</i> (cf. Buffa 1972); Ukr. dial. <i>hojove tysta</i> (cf. Makowiecki 1936: 279).	These names evoke words for 'wound' and/or 'to heal, to cure'.
blossoming time	common chicory, Cichorium intybus L.	Croat. dial. <i>peter, petriš</i> (cf. Šugar HBI); Czech dial. <i>kořeni sv. Petra</i> (cf. Kosík 1941); Pol. dial. <i>korzeń św. Piotra</i> (cf. Waniakowa 2012); Serb. dial. <i>nemep</i> (cf. Simonović BR); Slovak <i>koreň sv. Petra, korenje sv. Petra</i> (cf. Buffa 1972).	All these names refer to St. Peter whose feast is observed on the 29th of June.
smell	valerian, Valeriana officinalis L.	Old Czech, Czech dial. <i>kozlik</i> , Czech dial. <i>kozelec</i> (cf. Machek 1954: 224; Hladká 2000); Pol. dial. <i>koziolatek</i> (cf. Waniakowa 2012); Russ. dial. <i>козелок, козиолкы, козельцовый корень</i> and others (cf. Annenkov 1878); Slovak <i>kozlik</i> (cf. Buffa 1972); Ukr. dial. <i>kozlak</i> (cf. Makowiecki 1936: 391).	These names mean or refer to 'little buck'; the designation is connected with the buck-like smell of valerian's root which is used to make medicines.

ASPECT/ PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
causing chemical reactions	common soapwort, Saponaria officinalis L.	Czech <i>kořen mýdlový</i> (cf. Rystonová 2007); Fr. dial. <i>herbe à savon</i> ; It. <i>erba savona</i> ; Germ. <i>Seifenkraut</i> ; Med. Lat. <i>saponaria</i> (cf. Symb. I 159); Pol. <i>mydlnica lekarska</i> ; Russ. dial. <i>мыльный корень</i> (cf. Annenkov 1878); Slovak <i>mydlový koreň, mydelny koreň, mydlíkoreň</i> (cf. Buffa 1972); Ukr. dial. <i>mylnyj koriń</i> (cf. Makowiecki 1936: 331).	All these names evoke 'soap' due to common soapwort's ability to make foam.
positive properties	yellow sweet clover, Melilotus officinalis (L.) Pall.	Bulg. dial. <i>медна детелина, медовень трилистникъ</i> (cf. Achтаров 1939); Germ. <i>Honigklee</i> ; Med. Lat. <i>melilotum, melilotus, mellilotum, mellilotus</i> and others (cf. Symb. I 210; Marzell 2000 III col. 123); Pol. dial. <i>miodownik</i> (cf. Waniakowa 2012); Sloven. dial. <i>medena detelja</i> (cf. Karlin 1964).	All these names are derived from words for 'honey'.
supposed magic powers	running clubmoss, Lycopodium clavatum L.	Brus. dial. <i>бабін мур</i> (cf. Kiselevskij 1967); Pol. dial. <i>babimór, morzybab</i> (cf. Waniakowa 2012).	According to folk beliefs running clubmoss' sprouts hung under the ceiling in the bedroom on the day of Corpus Christi oppose evil forces and protect against nightmares. The dialectal sources say also that the plant is used especially against witches, property which is evoked in the referred names ('hag killer').
positive powers (legends and beliefs)	forget-me- not, Myosotis	Fr. <i>ne-m'oubliez-pas</i> ; Germ. <i>Vergißmeinnicht</i> ; It. <i>non ti scordar di me</i> ; Pol. <i>niezapominajka</i> ; Port. <i>não-me-esqueças</i> ; Rom. <i>nu mă uita</i> ; Russ. <i>незабудка</i> ; Sp. <i>noteolvides</i> (cf. Waniakowa 2015).	All these names correspond to the English one.

ASPECT/ PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
properties characteristic for other species	dandelion, Taraxacum officinale Web.	Brus. dial. <i>дикая цикорія</i> (cf. Annenkov 1878); <i>жоўтая цыкор'я</i> (cf. Kiselevskij 1967; Kolosova 2009: 188); Pol. dial. <i>cykoria, dzika cykoria, cykoria żółta</i> (cf. Waniakowa 2012); Russ. dial. <i>дикая цикория, дикий цикорь, желтая цикория</i> ; (cf. Kolosova 2009: 188; Annenkov 1878); Ukr. dial. <i>cykoryja</i> (cf. Makowiecki 1936: 366).	All these names mention chicory because the root of dandelion was used as its substitute.

PLACE OF OCCURRENCE

ASPECT / PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
place of occurrence	plantain, Plantago	Brus. dial. <i>подорожник</i> (cf. Chodurska 2003: 93); Dutch <i>weegbree</i> ; Germ. <i>Wegerich</i> ; Pol. dial. <i>podróznik</i> (cf. Waniakowa 2011); Russ. <i>подорожник</i> , Russ. dial. <i>дорожник, придорожник</i> (cf. Annenkov 1878); Slovak dial. <i>cestni zelina</i> (cf. Buffa 1972); Ukr. dial. <i>podorožnyk</i> (cf. Makowiecki 1936).	All these names derive from words meaning 'way, road, path'.

USAGE OF PLANTS

ASPECT / PROPERTY	BOTANIC NAMES IN ENGLISH AND LATIN	NAMES IN VARIOUS LANGUAGES	REMARKS
using given species in the household	common agrimony, Agrimonia eupatoria L.	Pol. dial. <i>parzydło</i> (cf. Waniakowa 2012); Russ. dial. <i>парыло</i> and <i>судопарь, судопорь</i> (cf. Annenkov 1878); Ukr. dial. <i>paryło</i> (cf. Makowiecki 1936: 15).	These names derive from verbs meaning 'to burn, to scald' and some of them also refer to 'pottery' because the plant was used to fire pots in folk culture.

Table 1. Main motivations of plant names

Certain characteristics of plants evoke definite associations, hence – generally speaking – we are dealing with metaphorical names that are secondary. Metaphors can lead to further references, Christian legends or to various beliefs associated with plants in general (healing properties, supposed magical powers, customs, etc.). For example, St. John's wort was considered in the Middle Ages as a plant driving away the devil and for this reason was called *fuga demonium* in Latin (Marzell 2000 II col. 939).

The majority of names referring to Christian legends contain elements of anthroponymy. It should be noted that some plant names that have a long tradition are motivated by various relations to the rites of the church year or with the church calendar. The phytonyms connected with the names of saints seem to indicate that some species were given healing or magical power by their patrons or, because of the role of the names of saints in the Christian calendar, only inform about the time of important phases of vegetation: their flowering or fruiting (cf. Rogowska-Cybulska 2007: 190).

In the domain of metaphorical plant names in the nomination process, firstly, one recognizes a characteristic feature of the plant (species), perhaps not very important objectively, but important for the society which is naming it. Secondly, this feature is processed in such a way that, on the basis of some kind of similarity to an object for which this feature is typical, the name of the object is transferred to this species of plant. In other words, a connection is made between the plant species and an object. Each time the plant name is renamed the relation is renewed. Someone who sees the plant and gets to know its name automatically deciphers the semantic motivation of the name and the basis of the metaphor.

Therefore, names based on similarity to other plants, including depreciative names (on the basis of a stereotype), names associated with properties characteristic for another plant, names associated with the supposed magical properties (e.g. apotropaic), names connected with tradition (legends, beliefs) and names associated with the use of the plant as a medicine can be considered as secondary names.

Colours in plant names

As we have just seen, botanic names constitute a complex field of research. One of the basic problems is the enormity of the material; each one of the huge number of species has many names in standard variety and in the dialects of a given language. Collection, consideration and detailed analysis of all of them (from the semantic, historical-comparative and etymological point of view) is an impossible task. A researcher can never say that he/she has gathered all the names of a species. The material is always incomplete because in a small geographical area or in any historical period an unknown name could be used.

Assigning a name to a particular species of plant is an extremely complicated task. Researchers have always had problems with correct identification of plants; many botanists and linguists emphasize it. It is worth noticing that the development stage of a plant also has great importance in its identification. Namely, a given plant can easily be confused with another one in the early stages of growth or in the final stage, after flowering, especially when it begins to die off (cf. Waniakowa 2012: 37).

As it is known, plants received their names with regard to their appearance (shape, construction, colour, flavour, aroma, etc.), features (for instance magic or curative), locus and purpose. Hence the names usually refer to features strongly associated with the species, considered as typical of them (cf. Wierzbicka 2002: 552). They reflect the current knowledge of given communities which relies on the so called connotative features. Namely, typical characteristics of specimens that become the basis of stereotypes, including often purely external features of the plants that, in fact, are not always important. Properties of plants, which are most important for man, can be divided into three general groups (Tokarski 1993: 340–341):

- environmental characteristics (including its blossoming period as the most significant for the development of the plant),
- physical characteristics,
- purpose.

The role of magical powers attributed to certain plant species should be stressed. Therefore, there is the problem of taboo, concerning particularly toxic and medicinal plants. Names resulting from this taboo have a specific structure: they do not refer directly to a particular species because “a magical plant is not called by its actual name” (Brückner SEJP 362).

It should be remembered that a species is usually characterized by several attributes at once. Each of these features can be the basis of a name because someone who is naming a plant is drawing attention generally to one of many characteristics of the species. If we consider that each of these features can be the basis of many names, we have a huge number of possibilities. Moreover, the same species may have different names depending on the perception of individual stages of specimens. We should also consider that in history many names passed from species to species because of alleged similarities or a similar purpose of these plants. Therefore, a large number of plant names are connected with a multitude of possible semantic motivations in the process of the naming of species.

The system of semantic division of names intersects with another one which is based on metaphorical plant names. The problem of their metaphorical character has been mentioned many times in linguistic literature on different occasions. The Czech researcher Z. Hladká (2000) has dedicated a monograph to this problem. Various features of botanical species are the basis of metaphors in plant names. Therefore, metaphorical plant names are secondary because we have to decipher the origin of the metaphor each time, which equals discovering their original semantic motivation.

ANALYSIS

Some groups of plant names that were motivated in various ways by colours will hereby be presented. Examples of names in European languages and in their dialects that will be shown have mainly been taken from Marzell 2000, André 1956, Waniakowa 2012, Annenkov 1878, Makowiecki 1936, Genaust 2005 and Clifford & Bostock 2007.

Firstly, colours are used in plant names which are motivated by the appearance of these plants. They are usually connected with the colour of the flowers, but sometimes also concern other parts of the plants, for instance foliage and stalks. This is an old tradition, dating back to Ancient Greek. Some historical Greek plant names containing the colour red as an element (cf. Gr. ἐρυθρός ‘red’) will now be quoted:

historical Greek name	scientific name	English name	semantic motivation
ἐρυθρόκομος (Pliny the Elder, 1 st c. AD)	<i>Punica granatum</i> L. (from Samos)	pomegranate from Samos	red foliage
ἐρυθρόδανον (Dioscorides, Pliny the Elder, 1 st c. AD)	<i>Calystegia soldanella</i> Br.	seashore false bindweed, shore bindweed, shore convolvulus	red stalks
ἐρυθρόνιον (Dioscorides, 1 st c. AD)	<i>Erythronium</i>	fawn lily, trout lily	pink or red flowers
σατύριον ἐρυθραϊκόν (Dioscorides, 1 st c. AD)	<i>Erythronium dens canis</i> L.	dog’s-tooth-violet	pink or purple flowers

Names of colours appear also in historical (i.e. pre-Linnaean) Latin plant names. There are some examples:

historical Latin name	scientific name	English name	semantic motivation
<i>Herba lutea</i>	<i>Genista tinctoria</i> L.	dyer’s greenweed	yellow flowers (Lat. <i>luteus</i> ‘yellow, reddish’)
	<i>Reseda luteola</i> L.	yellow weed, dyer’s weed (sic!)	
<i>Virga aurea</i>	<i>Senecio nemorensis</i> L.	alpine ragwort	yellow flowers (Lat. <i>aureus</i> ‘golden’)
	<i>Solidago virga-aurea</i> L.	European goldenrod	
<i>Coma aurea</i>	<i>Helichrysum (stoechas)</i> DC.)	dwarf (everlasting)	
<i>Gramen aureum</i>	<i>Trisetum flavescens</i> (L.) P. Beauv.	yellow oat grass	golden yellow panicles
<i>Spina alba</i>	<i>Cirsium eriophorum</i> (L.) Scop.	woolly thistle	white woolly hairs on much of the herbage (Lat. <i>albus</i> ‘white’)
	<i>Echinops sphaerocephalus</i> L.	glandular globe-thistle	white flowers
	<i>Onopordum acanthium</i> L.	cotton thistle	white woolly hairs covering the plant
<i>Gramen album</i>	<i>Eriophorum</i>	cotton grass	snow-white fluff on heads
<i>Virga argentea</i>	<i>Erigeron canadensis</i> L.	horseweed	white petals (Lat. <i>argenteus</i> ‘silvery’)
<i>Mater nigra</i>	<i>Centaurea iacea</i> L.	brown knapweed	dark flower heads (Lat. <i>niger</i> ‘black’)
	<i>Centaurea nigra</i> L.	black knapweed	

As we can see, sometimes one Latin name referred to more than one species. It is remarkable that some English equivalents of historical Latin plant names contain the terms of colours too.

There are also names of colours in other botanic terms in different European languages which imitated the ancient tradition of naming plants:

historical name in a European language	scientific name	English name	semantic motivation
Germ. <i>blow violen</i> (1500), <i>blaw Violen</i> (1543)	<i>Viola odorata</i> L.	wood violet, sweet violet	dark blue flowers (Germ. <i>blau</i> 'blue')
Germ. <i>rote Buck</i> (1532)	<i>Artemisia vulgaris</i> L.	mug wort, common wormwood	red-brown flowers (Germ. <i>rot</i> 'red')
Pol. <i>czerwony dzwonek</i> (1613)	<i>Hypericum perforatum</i> L.	common Saint John's wort	red sap of flowers (Pol. <i>czerwony</i> 'red')
Slovak <i>zbožná červená ružička</i> (1825) (Buffa 1972)	<i>Agrostemma githago</i> L.	common corn-cockle	red-purple flowers (Slovak <i>červený</i> 'red')
Pol. <i>zółcień</i> (1564)	<i>Calendula officinalis</i> L.	pot marigold, common marigold	yellow-orange flowers (Pol. <i>zółty</i> 'yellow')

Contemporary plant names are also motivated by colours. It concerns Latin scientific plant names, standard plant names in different European languages as well as dialectal names. It is worth noticing that some Linnaean names depend on historical Latin plant names; Linnaeus was obviously inspired by old names and adapted them to modern botany. There are some examples of Latin scientific plant names containing terms of colours:

scientific name	English name	semantic motivation
<i>Digitalis purpurea</i> L.	common foxglove	red-purple flowers (Lat. <i>purpureus</i> 'purple')
<i>Acer rubrum</i> L.	red maple	red foliage in autumn, red flowers (Lat. <i>ruber</i> 'red')
<i>Piper nigrum</i> L.	black pepper	black fruits
<i>Lamium album</i> L.	white nettle, white dead-nettle	white flowers
<i>Potentilla argentea</i> L.	silver cinquefoil	white tomentum covering the whole plant
<i>Solidago virga-aurea</i> L.	European goldenrod	yellow flowers
<i>Nuphar lutea</i> (L.) Sibth. & Sm.	yellow water-lily	

The next group contains examples of standard plant names in different European languages. The species are named because of the colour of their various parts:

name in a European language	scientific name	English name	semantic motivation
Fr. <i>chénopode blanc</i>	<i>Chenopodium album</i> L.	white goosefoot, melde	whitish coat on the underside of the leaves (Fr. <i>blanc</i> 'white')
Fr. <i>serpentaire rouge</i>	<i>Bistorta officinalis</i> Del., syn. <i>Polygonum bistorta</i> L.	bistort	reddish-brown rhizome, pink flowers (Fr. <i>rouge</i> 'red')
Fr. <i>bleuet</i>	<i>Centaurea cyanus</i> L.	cornflower	blue flowers (Fr. <i>bleu</i> 'blue')
Engl. <i>yellow dock</i>	<i>Rumex crispus</i> L.	= yellow dock	yellow inflorescence
Engl. <i>red poppy</i>	<i>Papaver rhoeas</i> L.	= red poppy	red flowers
Germ. <i>Goldrute</i>	<i>Solidago virga-aurea</i> L.	European goldenrod	yellow flowers (Germ. <i>Gold</i> 'gold')
Germ. <i>schwarzer Nachtschatten</i>	<i>Solanum nigrum</i> L.	European black nightshade	black fruits (Germ. <i>schwarz</i> 'black')
Germ. <i>weisser Senf</i>	<i>Sinapis alba</i> L.	white mustard	pale yellow seeds (Germ. <i>weiss</i> 'white')
Pol. <i>komosa czerwona</i>	<i>Chenopodium rubrum</i> L.	red goosefoot	reddish inflorescence (Pol. <i>czerwonawy</i> 'reddish')
Pol. <i>nostrzyk żółty</i>	<i>Melilotus officinalis</i> (L.) Pall.	yellow sweet clover, yellow melilot	yellow flowers

It should be highlighted that many plant names motivated by colours appear in dialects of different European languages. There are some examples:

dialectal name in a European language	scientific name	English standard name	semantic motivation
Engl. dial. <i>gold chain</i>	<i>Sedum acre</i> L.	gold moss stonecrop	golden-yellow flowers
Germ. dial. <i>rote Blume</i>	<i>Paeonia</i>	peony	most often red or pink flowers
Germ. dial. <i>Rot-Enzen</i>	<i>Gentiana purpurea</i> L.	purple gentian	brown-red flowers
Dan. dial. <i>guldknap</i>	<i>Tanacetum vulgare</i> L.	tansy, golden buttons	yellow flowers (Dan. <i>guld</i> 'gold')
Fr. dial. <i>tue-loup bleu, tore bleue</i>	<i>Aconitum napellus</i> L.	monk's-hood, aconite, wolfs bane	blue flowers
Pol. dial. <i>modrak</i>	<i>Centaurea cyanus</i> L.	cornflower	blue flowers (Pol. <i>modry</i> 'deep blue')
Pol. dial. <i>czerwonka</i>	<i>Rumex hydrolapathum</i> Huds.	great water dock	reddish inflorescence and stalk
Czech dial. <i>zlatý květ</i>	<i>Caltha palustris</i> L.	marsh-marigold	yellow flowers (Czech <i>zlatý</i> 'golden')

Sloven. dial. črna	<i>Pimpinella saxifraga</i> L.	burnet-saxifrage, lesser burnet	dark blue colour of the inside of the rhizome (Sloven. <i>črn</i> 'black')
Croat. dial. iskrica žuta	<i>Ranunculus acer</i> L.	meadow buttercup	yellow flowers (Croat. <i>žuti</i> 'yellow')
Ukr. dial. bilavka, bilavka	<i>Bellis perennis</i> L.	common daisy	white flowers (Ukr. <i>білий</i> 'white')
Ukr. dial. bitohotovnyk	<i>Achillea millefolium</i> L.	yarrow	
Russ. dial. желтый молочай	<i>Chelidonium maius</i> L.	swallowwort	yellow flowers (Russ. <i>желтый</i> 'yellow')

A deeper analysis shows that European standard and dialectal plant names often are a continuation of historical names, especially historical Latin (pre-Linnaean) ones. It is visible in names motivated by colours, cf. for example Lat. hist. *Virga aurea* and its exact translations: Eng. *European goldenrod*, Germ. *Goldrute*, Pol. dial. **złota różga** (*Solidago virga-aurea* L.), names inspired by the yellow colour of this plant's flowers¹.

Several species of plants are so strongly associated with a given colour that in the majority of languages their names are all motivated by this particular colour. One of these species is red clover, *Trifolium pratense* L., which has dark pink flowers. Their colour influenced already the historical Latin names of this plant, cf. Lat. *trifolium pratense purpureum*, *trifolium pratense rubrum* (1623) and, subsequently, other historical names in different languages such as:

- Germ. **Rother Klee** (1829), **Rotklee** (1878);
- Dutch **roode klaver** (earlier);
- Dan. **rødkløver** (1767);

¹ This phenomenon is also observable in many other dialectal botanical names, cf. e.g.: Med. Lat. *branca ursina*, *branca ursi* and Russ. dial. *медвѣжья лапа* (Annenkov 1878), Sloven. dial. *medvedove tace*, *medvedova taca*, *medvedova dlan* (Barlè 1937, Simonović BR, Karlin 1964), Croat. dial. *taca medvedova*, *medviđa šapa*, *medvedji dlan*, Serb. dial. *медвеђи длан*, *мечја шапа* (Šugar HBI, Simonović BR). These dialectal names are calques of the Medieval Latin metaphorical name for *Heracleum sphondylium* L. (common hogweed) and are all motivated by the shape of this plant's leaves, imagined to be similar to a bear's paw.

- Swed. **rödvepling** (1716), **rödklöfver** (1806).

Contemporary standard names of red clover in many European languages also refer to the colour of its flowers, cf. e.g.:

- Dutch **rode klaver**;
- Fr. **trèfle rouge**;
- Span. **trébol rojo**, **trébol violeta**;
- Port. **trevo vermelho**;
- It. **trèfoi ross** (Brescia), **trifoglio rosso**, **trifoglio violetto**;
- Rum. **trifoi-roșu**;
- Pol. **koniczyna czerwona**;
- Czech **jetel červený**;
- Russ. **клевер красный**;
- Ukr. **червона конюшина**, **червоний горішок**;
- Serb. **црвена детелина**.

Red clover has also, for example in German, several metaphorical names connected to the colour of its flowers. They relate to an item associated with red (or pink) colour that could be important and typical in the past, namely meat (Germ. *Fleisch*). There are historical and later dialectal German names such as: **Fleischblumen** (1500, 1532, 1539, 1582, 1588), **Fleischklee** (1829) and just **Fleisch** (cf. Marzell 2000 IV col. 784–785).

Speaking about metaphorical names, the importance of taboo in the act of naming plants must not be forgotten. The names of poisonous plants, also motivated by colours, are a good example because they often act as a warning. E.g., there is a highly poisonous, hallucinogenic species, *Hyoscyamus niger* L., which has the following names in various languages:

- Eng. **black henbane**;
- Fr. **jusquiame noire**;
- Span. **beleño negro**;
- It. **giusquiamo nero**;

- Germ. *schwarze* *Bilsenkraut*;
- Pol. *lulek czarny*;
- Russ. *белена черная*.

Similarly, other poisonous plants are often “black” too, for instance:

- pasque flower, *Pulsatilla*, which is highly toxic, is called *černá bylina* in Slovak dialects (Slovak *černý* ‘black’);
- poisonous common corn-cockle, *Agrostemma githago* L., is called *czarnucha* in Polish dialects (Pol. *czarny* ‘black’);
- mug wort, *Artemisia vulgaris* L., which is toxic in larger quantities, is called *чорнобилъ* in Ukrainian (Ukr. *чорний* ‘black’).

As we can see, the colour black plays a primary role here as a metaphorical reference to danger and death.

Another observation to be made is that plant names motivated by colours do not always contain the proper names of colours. Sometimes, especially in metaphorical names, there are only references to some elements associated with given colours or typical to them. Such names appeared both in the past and do so nowadays. Some examples are given here:

name in a European language	scientific name	English name	semantic motivation
Germ. <i>Butterblume</i> (1673)	<i>Taraxacum officinale</i> Web.	dandelion	yellow flowers (of the colour of butter)
Germ. dial. <i>Katzenauge</i>	<i>Veronica chamaedrys</i> L.	germander speedwell	cerulean blue flowers (of the colour of a cat's eye)
Fr. dial. <i>pantoufes de Marie</i>	<i>Aconitum napellus</i> L.	monk's-hood, aconite, wolfs bane	blue flowers (of the colour related to Saint Mary)
Pol. dial. <i>niebioska</i>	<i>Myosotis</i>	forget-me-not	cerulean blue flowers (of the colour of the sky – Pol. <i>niebo</i>)
Ukr. dial. <i>со́на́чник травовий</i> , <i>сонник травний</i>	<i>Ranunculus acer</i> L.	meadow buttercup	yellow flowers (of the colour of the sun – Ukr. <i>сонце</i>)
Ukr. dial. <i>Ісуса кров</i> , <i>Христова кров</i>	<i>Hypericum perforatum</i> L.	common Saint John's wort	red sap of flowers (of the colour of the blood (of Christ) – Ukr. <i>кров</i> ‘blood’)

Finally, it should be noted that colour can play a role in distinguishing between species and even between genera of plants. As an example of such a situation, allow it to be mentioned that Croatian denominations *patlidžan modri* and *patlidžan plavi* (literally 'blue eggplant') refer to the eggplant, *Solanum melongena* L., while the name *patlidžan crveni* (literally 'red eggplant') refers to the tomato, *Solanum lycopersicum* L. Similarly, Macedonian *crn* ('black') or *modar* ('blue') *patlidžan* mean 'eggplant' and *crven* ('red') *patlidžan* signify 'tomato' (cf. Waniakowa 1999: 62; Dębowiak & Waniakowa 2016: 85).

Summary and outlook

As can be seen from the above-mentioned division of names due to their semantics, the names of plants are motivated by several main general features: the appearance of the plant, the place of its occurrence, properties of the plant, its usage and other motivations specific to the genus or species. The semantic motivation of phytonyms is the basis of the nomination mechanism. To decipher it properly, one needs a thorough botanical, cultural, historical and linguistic knowledge. Without it, an in-depth study of the origin of plant names is difficult, if not impossible.

Finally, regarding the topic of status of plant names in dictionaries, one should remark that only a small part of them appear in general dictionaries, that is, exclusively the most commonly known ones are to be found in non-specialist lexicographic works. Nevertheless, phytonyms are present considerably more often in dictionaries and works describing lexical resources of particular dialects and, obviously, devoted strictly to botanic terminology, such as Annenkov 1878, Makowiecki 1936, Marzell 2000.

Furthermore, the above review allows us to conclude that colours have played a significant role in the mechanism of naming plants ever since. There are some groups of semantic motivation that can be identified, but the most popular seems to be the one related to the appearance of plants and their most characteristic features. The names of colours are usually present in botanical

names as attributives referring to nouns. However, examples such as Pol. *zółcień*, *modrak*, *czerwonka*, *czarnucha*, Ukr. *bilavka*, Fr. *bleuet* show that plant names which are motivated by colours do not always have a two-part structure (noun and adjective of colour), but can also be derivatives from adjectives of colour.

Moreover, it is worth emphasizing some general issues that are manifest in our material:

- there are close connections between some dialectal European plant names and pre-Linnaean Latin nomenclature;
- Linnaean scientific plant names depend sometimes on Latin historical names;
- taboo often played an important role in the act of naming plants, visible also in some botanical names motivated by colours.

Word index

Brus. dial. *бабін мур*, **running clubmoss**, lit. 'hag killer'

Brus. dial. *венжоўнік*, *венжовникъ*, **snakeroot**, lit. 'snake (plant)'

Brus. dial. *дикая цикорія*, **dandelion**, lit. 'wild chicory'

Brus. dial. *жоўтая цыкор'я*, **dandelion**, lit. 'yellow chicory'

Brus. dial. *малачай*, **dandelion**, lit. 'milk (plant)'

Brus. dial. *подорожник*, **plantain**, lit. 'by the roadside (plant)'

Brus. dial. *сребник*, *срибник*, *сярэбранік*, **common silverweed (midsummer silver)**, lit. 'silver (plant)'

Brus. dial. *хробуст*, *хрыбуст*, **cabbage thistle**, lit. 'scraping, rattling (plant)'

Brus. dial. *царская свечка*, **mullein**, lit. 'king's candle'

Bulg. dial. *медна детелина*, *медовень трилистникъ*, **yellow sweet clover**, lit. 'honey clover'

Bulg. dial. *млечка*, **dandelion**, lit. 'milk (plant)'

Bulg. dial. *царска свѣщь*, **mullein**, lit. 'king's candle'

Croat. *mliječ*, **dandelion**, lit. 'milk (plant)'

Croat. dial. *bodeća jabuka*, **thorn-apple**, lit. 'pricking apple'

Croat. dial. *mlačak*, *mlečec*, *mličak*, *mliječnjak*, **dandelion**, lit. 'milk (plant)'

Croat. dial. *peter*, *petriš*, **common chicory**, lit. 'Peter (plant)'

Croat. dial. *puhalica*, *puhavka*, **dandelion**, lit. 'blowing (plant)'

Croat. dial. *škrbinka*, **cabbage thistle**, lit. 'scraping, rattling (plant)'

Croat. dial. *žicara*, **common knotgrass**, lit. 'wire (plant)'

Czech *jablko trnové*, *bodlavé jablko*, **thorn-apple**

Czech *kořen mýdlový*, **common soapwort**, lit. 'soap root'

Czech *medvědí lapa*, **running clubmoss**, lit. 'bear's paw'

Czech dial. *koření sv. Petra*, **common chicory**, lit. 'St. Peter's roots'

Czech dial. *lví zub*, **dandelion**, lit. 'lion's tooth'

Czech dial. *mláč*, *mlíč*, **dandelion**, lit. 'milk (plant)'

Czech dial. *mordovník*, **monk's-hood**, lit. 'murder (plant)'

Czech dial. *pantoflíčky*, **monk's-hood**, lit. 'slippers'

Czech dial. *ranocel*, **plantain**, lit. 'healing wounds (plant)'

Czech dial. *slaměnka*, **dwarf everlast**, lit. 'straw (plant)'

Czech dial. *stříbrník*, *stříbrníček*, **common silverweed (midsummer silver)**, lit. 'silver (plant)'

Czech dial. *svíce královská*, **mullein**, lit. 'king's candle'

Czech dial. *vlačěha*, *vláčěha*, **running clubmoss**, lit. 'crawling, creeping (plant)'

Old Czech, Czech dial. *kozlík*, Czech dial. *kozelec*, **valerian**, lit. 'little buck'

Dan. *stråblomst*, **dwarf everlast**, lit. 'straw flower'

Dutch *stroobloem*, **dwarf everlast**, lit. 'straw flower'

Dutch *weegbree*, **plantain**, lit. 'by the roadside (plant)'

Dutch *zilverkruid*, **common silverweed (midsummer silver)**, lit. 'silver herb'

Engl. *wolfsbane*, **monk's-hood**

Engl. *iron grass*, **common knotgrass**

Engl. dial. *lion's tooth*, **dandelion**

Fr. *argentine*, **common silverweed (midsummer silver)**, lit. 'silver (plant)'

Fr. *bleuet*, **cornflower**, lit. 'blue (flower)'

Fr. *fleur de paille*, **dwarf everlast**, lit. 'straw flower'

Fr. *herbe argentée*, **common silverweed (midsummer silver)**, lit. 'silver grass'

Fr. *herbe de fer*, **common knotgrass**, lit. 'iron herb'

Fr. *ne-m'oubliez-pas*, **forget-me-not**

Fr. *plantain à cinq nerfs*, **broadleaf plantain**, lit. 'five nerves plantain'

Fr. dial. *herbe à savon*, **common soapwort**, lit. 'soap herb'

Fr. dial. *pantoufes de Marie*, **monk's-hood**, lit. 'Mary's slippers'

Old Fr. *dent de lion*, **dandelion**, lit. 'lion's tooth'

- Germ. *Bärenlapp*, **running clubmoss**, lit. 'bear's paw'
- Germ. *eisenkrut*, *Eisenkraut*, **common knotgrass**, lit. 'iron herb'
- Germ. *Eisengras*, **common knotgrass**, lit. 'iron grass'
- Germ. *Fünfadern-Kraut*, *Fünfadere(n)krut*, **broadleaf plantain**, lit. 'five nerves herb'
- Germ. *Fiefaderblatt*, **broadleaf plantain**, lit. 'five nerves leaf'
- Germ. *gemeiner Stechapfel*, **thorn-apple**, lit. 'common pricking apple'
- Germ. *Honigklee*, **yellow sweet clover**, lit. 'honey clover'
- Germ. *Königskerze*, **mullein**, lit. 'king's candle'
- Germ. *Löwenzahn*, **dandelion**, lit. 'lion's tooth'
- Germ. *Pfefferkraut*, **water-pepper**, lit. 'pepper herb'
- Germ. *Sand-Strohblume*, **dwarf everlast**, lit. 'sand-straw flower'
- Germ. *Scharfkraut*, **water-pepper**, lit. 'spicy herb'
- Germ. *Schlangenwurz*, **snakeroot**
- Germ. *Seifenkraut*, **common soapwort**, lit. 'soap herb'
- Germ. *Silberkraut*, **common silverweed (midsummer silver)**, lit. 'silver herb'
- Germ. *Teufelswurz*, **monk's-hood**, lit. 'devil's root'
- Germ. *Vergißmeinnicht*, **forget-me-not**
- Germ. *Wegerich*, **plantain**, lit. 'by the roadside (plant)'
- Germ. *Wundkraut*, **plantain**, lit. 'wound herb'
- Germ. *Ziegentod*, **monk's-hood**, lit. 'goat's death'
- Germ. dial. *Pantoffeln*, **monk's-hood**, lit. 'slippers'
- Germ. dial. *Strohblaut*, *Striehloume*, *Strîhblâm*, **dwarf everlast**, lit. 'straw flower'
- Germ. dial. *Teufelskraut*, **monk's-hood**, lit. 'devil's herb'
- Germ. dial. *Totenblume*, **monk's-hood**, lit. 'death flowers'
- It. *argentina*, **common silverweed (midsummer silver)**, lit. 'silver (plant)'
- It. *erba savona*, **common soapwort**, lit. 'soap herb'
- It. *non ti scordar di me*, **forget-me-not**
- Kash. *gojqce listki*, **plantain**, lit. 'healing leaves'
- Kash. *pięciożyłki*, **broadleaf plantain**, lit. 'five nerves (plant)'
- Lith. *šiaudinė*, *šiaudinėlis*, *šiaudinikė*, *šiaudinukas*, **dwarf everlast**, lit. 'straw (plant)'
- Med. Lat. *argentaria*, *argentina*, **common silverweed (midsummer silver)**, lit. 'silver (plant)'
- Med. Lat. *colubrina*, *viperina*, *viperana*, *viperaria*, *viperina rubea*, **snakeroot**, lit. 'adder (plant)'

Med. Lat. *dragantea*, *dragentea*, *dragenthea*, *dragon*, *dragonthea*, *draguntea*, *serpentaria*, *serpentaria maior*, *serpentina*, *serpentina maior*, *serpentina rubea*, **snakeroot**, lit. 'snake (plant)'

Med. Lat. *dens leonis*, **dandelion**, lit. 'lion's tooth'

Med. Lat. *melilotum*, *melilotus*, *mellilotum*, *mellilotus*, **yellow sweet clover**, lit. 'honey lotus'

Med. Lat. *pes ursinus*, **running clubmoss**, lit. 'bear's paw'

Med. Lat. *quinquenervia maior*, **broadleaf plantain**, lit. 'five nerves (plant)'

Med. Lat. *saponaria*, **common soapwort**, lit. 'soap (plant)'

Pol. *chaber bławatek*, **cornflower**, lit. 'blue cornflower'

Pol. *dmuchawiec*, **dandelion**, lit. 'blowing (plant)'

Pol. *mlecz*, **dandelion**, lit. 'milk (plant)'

Pol. *mydlnica lekarska*, **common soapwort**, lit. 'medicinal soap (plant)'

Pol. *niezapominajka*, **forget-me-not**, lit. 'forget-me-not (plant)'

Pol. *rdest ostrogorzki*, **water-pepper**, lit. 'spicy-bitter water-pepper'

Pol. *słomianka*, **dwarf everlast**, lit. 'straw (plant)'

Pol. *wężownik*, **snakeroot**, lit. 'snake (plant)'

Pol. dial. *babimór*, *morzybab*, **running clubmoss**, lit. 'hag killer'

Pol. dial. *bławat*, **cornflower**, lit. 'blue (flower)'

Pol. dial. *chrobust*, **cabbage thistle**, lit. 'scraping, rattling (plant)'

Pol. dial. *cykoria*, **dandelion**, lit. 'chicory'

Pol. dial. *cykoria żółta*, **dandelion**, lit. 'yellow chicory'

Pol. dial. *czołga*, *włóczęga*, **running clubmoss**, lit. 'crawling, creeping (plant)'

Pol. dial. *drutowiec*, **common knotgrass**, lit. 'wire (plant)'

Pol. dial. *dzika cykoria*, **dandelion**, lit. 'wild chicory'

Pol. dial. *jabłko cierniste*, **thorn-apple**

Pol. dial. *korzeń św. Piotra*, **common chicory**, lit. 'St. Peter's root'

Pol. dial. *koziotek*, **valerian**, lit. 'little buck'

Pol. dial. *królewska świeca*, **mullein**, lit. 'king's candle'

Pol. dial. *łapa niedźwiedzia*, **running clubmoss**, lit. 'bear's paw'

Pol. dial. *łwi ząb*, **dandelion**, lit. 'lion's tooth'

Pol. dial. *miodownik*, **yellow sweet clover**, lit. 'honey (plant)'

Pol. dial. *mordownik*, **monk's-hood**, lit. 'murder (plant)'

Pol. dial. *pantofelki*, **monk's-hood**, lit. 'slippers'

Pol. dial. *parzydło*, **common agrimony**, lit. 'scald (plant)'

Pol. dial. *pępawa*, **dandelion**, lit. 'swelled (plant)'

Pol. dial. *podróżnik*, **plantain**, lit. 'by the roadside (plant)'

- Pol. dial. *ranocel*, **plantain**, lit. 'healing wounds (plant)'
- Pol. dial. *srebrnik*, **common silverweed (midsummer silver)**, lit. 'silver (plant)'
- Port. *dente-de-leão*, **dandelion**, lit. 'lion's tooth'
- Port. *mata-lobos*, **monk's-hood**, lit. 'wolves killer'
- Port. *não-me-esqueças*, **forget-me-not**
- Port. *persicária-mordaz*, **water-pepper**, lit. 'bitter water-pepper'
- Port. *persicária-picante*, **water-pepper**, lit. 'spicy water-pepper'
- Port. *vela-de-bruxa*, **mullein**, lit. 'hag's candle'
- Rom. *flori-de-paie*, **dwarf everlast**, lit. 'straw flowers'
- Rom. *nu mă uita*, **forget-me-not**
- Russ. *горéц пéречный*, **water-pepper**, lit. 'peppery bitter (plant)'
- Russ. *змеиный корень*, **snakeroot**
- Russ. *незабудка*, **forget-me-not**, lit. 'forget-me-not (plant)'
- Russ. *подорожник*, **plantain**, lit. 'by the roadside (plant)'
- Russ. dial. *дикая цикория*, *дикій цикорь*, **dandelion**, lit. 'wild chicory'
- Russ. dial. *дорожник*, *придорожник*, **plantain**, lit. 'by the roadside (plant)'
- Russ. dial. *желтая цикория*, **dandelion**, lit. 'yellow chicory'
- Russ. dial. *козелок*, *козиолкы*, **valerian**, lit. 'little buck(s)'
- Russ. dial. *козельцовый корень*, **valerian**, lit. 'little buck's root'
- Russ. dial. *колюки-яблоки*, **thorn-apple**
- Russ. dial. *львиный зубъ*, *львиный зубецъ*, **dandelion**, lit. 'lion's tooth'
- Russ. dial. *молочай*, *молочникъ*, **dandelion**, lit. 'milk (plant)'
- Russ. dial. *мориморд*, **monk's-hood**, lit. 'murder (plant)'
- Russ. dial. *мыльный корень*, **common soapwort**, lit. 'soap root'
- Russ. dial. *парыло*, **common agrimony**, lit. 'scald (plant)'
- Russ. dial. *серебрянникъ*, **common silverweed (midsummer silver)**, lit. 'silver (plant)'
- Russ. dial. *судопаръ*, *судопоръ*, **common agrimony**, lit. 'pottery burner'
- Russ. dial. *царская свѣча*, **mullein**, lit. 'king's candle'
- Serb. *млеч*, Serb. dial. *млечак*, *мличак*, *млечац*, *млечец*, **dandelion**, lit. 'milk (plant)'
- Serb. dial. *бодеѣна јабука*, *бодлива јабука*, **thorn-apple**, lit. 'pricking apple'
- Serb. dial. *крављевска свиѣа*, **mullein**, lit. 'king's candle'
- Serb. dial. *петер*, **common chicory**, lit. 'Peter (plant)'
- Slovak *blavač*, **cornflower**, lit. 'blue (flower)'
- Slovak *horčiak pieprový*, **water-pepper**, lit. 'peppery bitter (plant)'

- Slovak *ježkové jablko*, **thorn-apple**
- Slovak *koreň sv. Petra*, *koreníe sv. Petra*, **common chicory**, lit. 'St. Peter's root(s)'
- Slovak *kozlík*, **valerian**, lit. 'little buck'
- Slovak *mlieč*, *mleč*, *mlič*, **dandelion**, lit. 'milk (plant)'
- Slovak *mordovník*, **monk's-hood**, lit. 'murder (plant)'
- Slovak *mydlový koreň*, *mydelny koreň*, *mydlíkoreň*, **common soapwort**, lit. 'soap root'
- Slovak *púpava*, **dandelion**, lit. 'swelled (plant)'
- Slovak *ranocel*, **plantain**, lit. 'healing wounds (plant)'
- Slovak dial. *cestni zelina*, **plantain**, lit. 'road herb'
- Slovak dial. *levský zub*, *lví zubec*, **dandelion**, lit. 'lion's tooth'
- Slovak dial. *medvedi noha*, *medvedia tlapa*, **running clubmoss**, lit. 'bear's paw'
- Slovak dial. *slamiha*, **dwarf everlast**, lit. 'straw (plant)'
- Slovak dial. *striebník*, **common silverweed (midsummer silver)**, lit. 'silver (plant)'
- Slovak dial. *vlačúha*, **running clubmoss**, lit. 'crawling, creeping (plant)'
- Sloven. dial. *bodeča jabuka*, **thorn-apple**, lit. 'pricking apple'
- Sloven. dial. *levov zob*, **dandelion**, lit. 'lion's tooth'
- Sloven. dial. *medena detelja*, **yellow sweet clover**, lit. 'honey clover'
- Sloven. dial. *mlečec*, *mlečje*, **dandelion**, lit. 'milk (plant)'
- Sorb. *mlóč*, *mlóčnak*, **dandelion**, lit. 'milk (plant)'
- Sp. *azulejo*, **cornflower**, lit. 'blue (flower)'
- Sp. *nomeolvides*, **forget-me-not**
- Sp. *persicaria acre*, **water-pepper**, lit. 'sour water-pepper'
- Sp. *persicaria picante*, **water-pepper**, lit. 'spicy water-pepper'
- Swed. *bitterpilört*, **water-pepper**, lit. 'bitter smartweed'
- Swed. *stråblomster*, **dwarf everlast**, lit. 'straw flower'
- Ukr. dial. *blavat*, **cornflower**, lit. 'blue (flower)'
- Ukr. dial. *carska svička*, **mullein**, lit. 'king's candle'
- Ukr. dial. *cykoryja*, **dandelion**, lit. 'chicory'
- Ukr. dial. *hojove lystá*, **plantain**, lit. 'healing leaves'
- Ukr. dial. *kozlak*, **valerian**, lit. 'little buck (plant)'
- Ukr. dial. *motoč dykyj*, **dandelion**, lit. 'wild milk (plant)'
- Ukr. dial. *mylnyj koriń*, **common soapwort**, lit. 'soap root'
- Ukr. dial. *paryto*, **common agrimony**, lit. 'scald (plant)'
- Ukr. dial. *podorožnyk*, **plantain**, lit. 'by the roadside (plant)'

Ukr. dial. *užovnyk*, **snakeroot**, lit. 'snake (plant)'

Ukr. dial. *χrobust*, *χrabust*, **cabbage thistle**, lit. 'scraping, rattling (plant)'

'Daisies' in some European languages: a survey of lexical knowledge

Alina Villalva et alii

Wild flowers may be quite anonymous. In fact, most of us are unaware of how they are called – in general, they are merely called flowers. Some, however, do receive a greater degree of lexical differentiation and eventually this is the case for '*daisies*' as these are common flowers that can be found (almost) all over Europe and have specific names in each language. Since these names look familiar or they even are cognate or loans from other languages, it is not easy to ascertain if they refer to the same species, or species that may differ in size, environment and properties, having only the shape of the flower in common. This mismatch may obviously raise some communication problems, but the problems that we are concerned with here are those that relate to the amount of (accurate) information that dictionaries may convey, especially in a cross-linguistic context.

Daisy was a consensual choice for the LandLex group, based on the assumption that (like '*hill*') this would be an 'easy' word, part of common knowledge and easy to find all-over Europe. The assumption that daisies grow spontaneously all-over Europe is contradicted by the fact that this is not the case in Estonia (and most probably other septentrional regions), though they have been introduced there some centuries ago, and, therefore, they are not wildflowers everywhere.

¹ This chapter comprehends several language-specific sections, whose authors are indicated where appropriate. The remaining sections were edited by Alina Villalva and they have largely benefitted from the input of all the other contributors (W. Blanck, E. Corino, I. Galleron, Y. Luther, N. Mederake, I. Metsmägi, V. Oja, S. Tsolakidis, I. Vazquez, A. Villalva, G. Williams).

The other assumption, which regards the common knowledge of what a ‘*daisy*’ is, has also proven fragile. Most people know one or more words that may be related to the English word ‘*daisy*’, they do have the notion that it refers to a flower, but only some are aware of what precise botanical species it refers to, if any, and some others think that they know, but what they know differs from what other people, presumably equally knowledgeable, do know.

Since dictionaries are our main concern, we dug into the most prominent lexicographers of their respective time, hoping to shed some light into a surprisingly shady concept, but we have also found difficulties in that front. Ultimately, ‘*daisy*’ became a ‘difficult’ word.

In this chapter, we will first consider the English word ‘*daisy*’, since this was our starting point and common reference. Subsequently, we will take a look at bilingual dictionaries, namely those that have English as a source language, to find out what they have to say regarding the equivalence of ‘*daisy*’ in some European languages, namely, Italian, French, Galician, Portuguese, Romanian, Modern Greek, German and Estonian. The third section regards the Latin noun *bellis*, which may have been the name for *daisies* in the ancient Roman world, and also served to name a botanical species (i.e. *bellis perennis*) many centuries later. In the fourth section, we deal with a name for *daisies* that can be found in a large number of languages. It is related to the Hellenistic Greek noun *μαργαρίτης* [marga‘rite:s], that meant ‘pearl’, but the modern metaphor has probably spread from the French *margerites* in the 13th century. The following three sections are devoted to particular languages, taking into account some observable regional tendencies (Romances languages, Modern Greek and German and Estonian), followed by a cross-linguistic analysis. Finally, we will present the European Roots prototype entry for the Hellenistic Greek base *μαργαρίτ*-².

² *μαργαρίτης* goes back possibly to a Middle Persian Old Persian word, cf. Middle Persian *marvārit* ‘pearl’. With this analysis, the Hellenistic Greek root or base is *μαργαρίτ*-, and *-ης* is the inflectional suffix.

English daisies³

Although they are very different plants, confusion can arise between *daisy* – *bellis perennis* and *oxeye daisy* – *leucanthemum vulgare*, simply because the word ‘*daisy*’ tends to get used as a generic word covering both. Our reference for current usage is the corpus based [ODE 2005] which defines the plant as being:

A small European grassland plant which has flowers with a yellow disc and white rays.

- *Bellis perennis*, family Compositae (or Asteraceae, the **daisy family**). The plants of this large family (known as composites) are distinguished by having composite flower heads consisting of numerous disc florets, ray florets, or both; they include many weeds (dandelions, thistles) and garden flowers (asters, chrysanthemums, dahlias)

The same dictionary simply gives the *oxeye daisy* as:

- A Eurasian daisy which has large white flowers with yellow centres. Also called MOON DAISY or MARGUERITE
- *Leucanthemum vulgare*, family Compositae

The root of the problem lies in the fact that the botanical family of compositae is the ‘*daisy*’ family thereby creating a potential confusion between the genus proximum and one possible definiens, which is the *bellis* of the definition and of the etymology *dæges éage* or ‘day’s eye’.

As ever, the finest historical overview of both words is to be found in the [OED 2009], which describes ‘*daisy*’ (s.v.) as:

The common name of *Bellis perennis*, family Compositæ, a familiar and favourite flower of the British Isles and Europe generally, having small flat flower-heads with yellow disk and white ray (often tinged with pink), which close in the evening; it grows abundantly on grassy hills, in meadows, by roadsides, etc., and blossoms nearly all the year round; many varieties are cultivated in gardens.

This avoids the confusion and also clearly marks the *ox-eye* as the American word for a different plant, *leucanthemum vulgare*, a plant in fact introduced into

³ The section on English was written by Geoffrey Williams.

the colonies by British settlers. Interestingly, it is now treated as an invasive plant and noxious weed.

In folk history, 'daisy' has a far richer presence than *leucanthemum* whose only claim to fame is to be a diminutive of *Margaret* and a favourite name for cows, and even this may only be a recollection of its French counterpart, *marguerite*, which holds a similar role. It is the common 'daisy' that is associated with the fairies, with childrens rhymes and decorations – *daisy chains* – and even in a light hearted approach to death through the expression of *pushing up daisies*. This is probably due to its ubiquitous place in the landscape as well as its mention in herbals as a loved and useful plant. The long list of usage, as well as colloquial expressions, given in the [OED 2009]'s 'daisy' entry clearly point to *bellis perennis*, despite the often frequent problem of naming plants in the pre-linnaeus era.

Turning to the dictionaries housed by the [LEME] database⁴, we get access to some of the earlier uses in reference works starting with an anonymous entry in the *Catholicon Anglicum: The Remedy for all Diseases* (circa 1475) [LEME] which relates it to the Latin *consolida*. Other dictionaries continue in the vein with it being termed *consolida minor*. The first herbal mentioning it is Banckes Herbal of 1525 [LEME] which translates *consolida minor* as being:

[...] Daysy or Browsworte. His vertue is yf it be stamped and layde to a botche / it shall hele it and breke it / for it is a spyce of the Confery.

Mention of *bruisewort*, and its preparation, appears in a number of works, but no record is found in [LEME] after 1642. The confusion brought in by a comparison with French can be found as early as 1548 in Turner's *The Names of Herbs in Greek, Latin, English, Dutch and French* [LEME], which declares that:

Bellis or Bellius named in Englishe a Dasie, is called of the Herbaries *Consolida minor*, in duch Massible and Cleyti Izitlo ssen, in french *Margarites* or *Petit consyre*. Dasies growe in al grene places in greate plentie.

⁴ *Lexicons of Early Modern English* allows online searches but does not give access to full work, only individual entries. For this reason, dictionary entries from the data base do not receive full bibliographical references and are mentioned as [LEME].

Bellis can be thus be translated as *marguerite*, without mention of *pâquerette*, and no reference is made to what could be the *ox-eye daisy*. However, Cotgrave 1611 [LEME] gives us two plants:

- Marguerite blanche: The great white daisy, called Maudlinwort
- Marguerite des prez: The ordinarie, little, white, and wild daisy, called (otherwise) bruisewort

Thus, ‘*daisy*’ is a purely English word, but *marguerite* was already known through the influence of French. Cotgrave 1611 [LEME] shows that room for confusion already exists in French despite there being two words *marguerite* and *pâquerette* with the former being often used as the hyperonym for both. *Maudlinwort* is thus the *ox-eye daisy* and *bruisewort* the common *daisy*, *Bellis*. *Maudlin* being the English form for *Magdalen*, not *Marguerite*. Although some English wild flowers retain the suffix *wort*, ‘plant’ in early English, the term *bruisewort* disappears from dictionaries with a last use in 1642. It is interesting that [Cotgrave 1611] links *daisies* to *pasture*, *Marguerite des près*, as one of the, disputed, etymologies for *pâquerette* associates it with *pasture* rather than *Easter*, *pâques* in French.

To sum up, in English, ‘*daisy*’ would seem to go through three phases in lexicographical terms. First there is a herbal interest in *bruisewort* as a cure. The next period is one of scholarly disinterest as later dictionaries do not go into detail in the description of the plant, the most laconic being Johnson who declares it to be “a kind of flower”. Finally, it is only in contemporary dictionaries that the *wild daisy*, *bellis*, seems to regain interest with the *ox-eye daisy* being largely overlooked. Much work remains to be done in phraseology and probably also in possible dialectal variations. However, it is already clear that we need a better model to cope with flora in dictionaries, all the more so in that what goes awry in a monolingual can render the situation far worse in bilinguals.

'Daisy' in Bilingual dictionaries

Bilingual dictionaries offer a set of equivalences between 'daisy' and one or more names in different European languages, eventually mediated by botanic taxonomic terms. The (paper and online) dictionaries that we have consulted are those that each target language experts acknowledge as state of the art for that particular language pair. The output of this survey, presented in alphabetic order, is as follows:

(1) a. ENGLISH-ESTONIAN⁵

daisy – *kirikakar*

daisy – *maarjalill*

b. ENGLISH-FRENCH⁶

daisy – (= flower) *pâquerette*

c. ENGLISH-GALICIAN⁷

daisy – *margarida*

d. ENGLISH-GERMAN⁸

daisy – *Gänseblümchen*⁹, *Gänseblume*, *Maßliebchen*, *Tausendschönchen*

⁵ Cf. [Silvet].

⁶ Cf. [Robert & Collins E-F online].

⁷ Bilingual dictionaries of Galician and languages other than Castilian are very recent, and they are all based on [DRAG 2012→] that only hosts *margarida* (and the variant *margarita*).

⁸ [LEO] (=link everything online) is a popular multilingual, commercial portal, which invites users to comment and collaborate on bilingual dictionaries with German as an equivalent language. It also links the equivalents to entries in other dictionary resources where users can find more information on orthography, grammar and semantics. Even though criticised as not being thoroughly reliable in terms of the presented content (cf. Hanks 2012: 77-82), the portal has caught on by providing different kinds of user participation and supports an active critical and scholarly discussion (cf. Nesi 2012: 368-9 ; Engelberg/Storrer 2016: 39; Abel/Meyer 2016: 283).

⁹ On the list of possible *daisy* equivalents, the diminutive *Gänseblümchen* is the first entry. It should be regarded as the most common contemporary German equivalent for

e. ENGLISH-GREEK¹⁰

daisy – μαργαρίτα [marya'rita]

f. ENGLISH-ITALIAN¹¹

daisy – (bot., *Bellis perennis*) margheritina; pratolina

daisy – (*Chrysanthemum leucanthemum*) margherita dei campi

g. ENGLISH-PORTUGUESE¹²

daisy – margarida

h. ENGLISH-ROMANIAN¹³

daisy – 1. Banuței, paralute (*Bellis perennis*); 2. Margareta aurata (*Chrysanthemum leucanthemum*)

Although other names may occur, this survey yields a surprisingly homogeneous map in the Romance languages domain and Modern Greek, favouring the cognates of the borrowing from the Greek μαργαρίτα [marya'rita] (cf. Figure 1). Germanic languages and Estonian reveal distinct lexical options.

the English word *daisy*. The labels 'bot.' (English) or 'wiss.: bellis perennis' (German) make the words and its equivalents easily identifiable.

¹⁰ Cf. [Collins E-G].

¹¹ Cf. [Ragazzini], [Zanichelli].

¹² [INFOPIEDIA I-E] This is the most popular dictionary in Portugal. The online edition basically replicates the preexisting paper edition.

¹³ Cf. [Levițchi & Bantaș].

the English equivalents listed s.v. *bellis*, *-idis* are “the white daisy, ox-eye”. The Latin-German dictionary by Georges translates *bellis* as ‘Gänseblume, Maßliebchen’, and he even identifies it as *bellis perennis* L. We may speculate that the Latin original name *bellis* was a cover term for different *asteraceae* plants, in Classical Latin, such as ‘daisy’ sometimes is in English, or other names in other languages, but there is no easy way to confirm this claim.

According to the [DELL], *bellis*, *-idis* corresponds to the French *marguerite* (anchored in Plinius description), and it may be a derivative from *bellus*, which is presented as a diminutive from *bonus* that the [DELL] claims to have a meaning close to *brave*. This etymological hypothesis suggests the the flower is named according to a positive assessment. Therefore, the name can not help us to understand which flower we are talking about – we just know that it is pretty. As we will later show, Galician and Portuguese forms *bonina* seem to derive from the base of *bellis*. And the German *Tausendschön(chen)* might correspond to a semantic loan from Latin.

It is interesting to note that the noun *bellis* did not left many heirs in contemporary Romance languages (cf. Italian *bèllide* and Galician *belorita* have never been the preferred names for the flower)¹⁴. That may explain why that name was chosen for a genus of the *asteraceae* family, in the mid 18th century. Classical Latin is a generous dead language, but Latin plant names assigned by botanists are typological conventions, eventually distant from vernacular names. Therefore, it is impossible to know if the flowers that the Romans called *bellis* are exactly the same as those that became classified as *bellis* by botanists¹⁵, and

¹⁴ In MG (cf. [‘bela]) and dialectal Estonian, there are several names for *daisy* that originate from Latin *bellis* (cf. *pelis*, *pel(l)is*, *pell*, *pelle*, *pillad*, *vellid*), but this is probably a vernacular adaptation of the botanical Latin name.

¹⁵ For botanists, “the genus *Bellis* is in the family *Compositae* in the major group *Angiosperms* (Flowering plants)”. Cf. *The Plant List* at www.theplantlist.org/1.1/about/. This list was created by the Royal Botanic Gardens, Kew and Missouri Botanical Garden, in 2013, claiming to be “a working list of all known plant species” that “includes no vernacular or common plant names”.

that is a limitation that we will have to face when dealing with vernacular names before and even after the existence of botanical typologies.

[Wikipedia] presents *bellis perennis*¹⁶ as “a common European species of ‘daisy’, of the Asteraceae family, often considered the archetypal species of that name. Many related plants also share the name ‘daisy’, so to distinguish this species from other daisies it is sometimes qualified as **common daisy**, **lawn daisy** or **English daisy**. Historically, it has also been commonly known as **bruisewort** and occasionally **woundwort** [...]. *Bellis perennis* is native to western, central and northern Europe, but widely naturalised in most temperate regions including the Americas and Australasia.”

Thus, the Latin name *bellis perennis* (L.) has an equivocal equivalence in English, which suggests that it will be of little help to understand what preceded Linnaeus’ classification in vernacular languages.

In sum, there is a curious abandon of the Classical Latin word *bellis* and a complex set of vernacular options to name the same or a bunch of slightly different flowers. The following sections are devoted to language-particular lexical descriptions. Eventually, in the end, this description will amount to more than the sum of its parts.

Pearls and flowers

Most Romance languages, as well as Modern Greek (cf. *μαργαρίτα* [marya'rita]) and even German (cf. *Margelite*) and Estonian (cf. *margareeta*)¹⁷, offer an equivalent

¹⁶ Kingdom: Plantae/*Clade*: Angiosperms/*Clade*: Eudicots/*Clade*: Asterids/Order: Asterales/Family: Asteraceae/Genus: *Bellis*/Species: *Bellis perennis* (L.). Cf. en.wikipedia.org/wiki/Bellis_perennis (April 2018).

¹⁷ Amongst other languages that have not been studied in this project, such as Albanian (cf. *margaritë*), Belarussian (cf. *маргарытка*), Bulgarian (cf. *маргаритка*), Latvian (cf. *margrietīna*), and Ukrainian (cf. *маргаритка*).

to *daisy* that originates in the Hellenistic Greek word *μαργαρίτης*¹⁸ [marga'rite:s] 'pearl', through the Latin borrowing *margarita*, that also meant 'pearl'.

In contemporary usage, the original meaning of the cognate words is generally unavailable in Romance languages. A metaphoric shift was responsible for the assignment of this word to the name of a small wild flower, though not always the same flower, if we compare different languages, according to the bilingual dictionaries mentioned above: in French, *marguerite* refers to *chrysanthemum leucanthemum*; in Italian, *margherita* refers to the same botanical species if it is modified by *dei campi*, and the diminutive form *margheritina* refers to *bellis perennis*; finally, in Galician and in Portuguese, the translation makes no distinction between the two botanical species – apparently, *daisies* are always *margaridas*.

The origin of this semantic change is uncertain. According to the [TLFi] (s.v. *marguerite*), “le sens de «fleur» s’est développé en français”, in the 13th century¹⁹. If this is the case, then we may find the French word at the centre of a very successful export, in the centuries to come²⁰. Eventually, the success may be related, though not clearly how, to the popularity of the romantic rhyme that can be found even in languages that have not adopted a version of this name for the flower²¹.

¹⁸ *μαργαρίτης* seems to be an oriental loanword of Iranian origin, maybe **mrga-ahri-ita*- 'lit. born from the shell of a bird, e.g. oyster'(cf. Middle Persian *marvārīt*, Modern Persian *marvārīd* 'pearl') (cf. Beekes 2010, pp. 904-905; Gershevitch 1989).

¹⁹ “XIII^e s. bot. *flors des margerites* «pâquerette»

²⁰ Notice that the loans from the French *marguerite* appear much later: German *Margerite* in the 16th century; Italian *margherita* in the 17th; Modern Greek *μαργαρίτα* [marya'rita] in the 17th (if we take into account that probably its first lexicographical testimony comes from a dictionary published in 1709); Portuguese *margarida* in the 18th; Romanian “margaretă” probably in the 19th (etymological dictionaries suggest also a possible borrowing from the German “Margarete”); and Estonian *margareeta* (borrowed via German) in the 20th.

²¹ It is easier to find information on the French ‘ritournelle’ called *effeuiller la marguerite*: La personne qui y joue associe chaque partie de la ritournelle: «elle (il) m’aime, un peu, beaucoup, passionnément, à la folie, pas du tout» (cf. [fr.wikipedia.org/wiki/Effeuiller_la_marguerite]).

In the [DEEL] we find another remark on the semantic shift. They claim that ‘we may suspect that Aristotle had some influence in the domain of biology and botanics since Renaissance times. In Latin, *margarita* has always meant pearl, but Aristotle, in his treaty on plants, uses the word to refer to an Egyptian plant. Maybe this is the origin of that semantic translation, since the flower that we call *margarita* could be called *bellis*, *aster* or *amellus*, according to its different varieties.’²²

In fact, the reference to Aristotle is problematic, since the word does not seem to be attested in his texts. Apparently, Pliny (1st century AD), in his *Historia Naturalis* (13.42) refers to a μαργαρίτις as a kind of palm-tree²³. This is not the

It is featured as a 19th century creation, eventually related to “une ancienne croyance normande” (cf. [didierbibard.blogspot.pt/2014/04/effeuiller-la-marguerite.html]). A web site called *Guichet du Savoir* claims that “cette expression française a vu le jour au milieu du XIX^{ème} siècle mais le jeu fondé sur la croyance aux propriétés divinatoires de cette fleur semble d’origine normande et plus ancien. It also quotes Delmas (2016), who has identified regional variation of this *ritournelle*, in France.

The *ritournelle* has also spread to other languages, though not exactly in the same terms. English, like many other languages, has a binary variant (i.e. X loves me / X loves me not). In Portuguese, the verse has a longer version (i.e. *mal me quer, bem me quer, muito, pouco ou nada* ‘X doesn’t like me, X likes me, a lot, a little, not at all’) and the first sequence was lexicalized as the flower name (i.e. *malmequer*). Since *malmequer* is used in Portuguese since, at least, the 16th century, the original French *ritournelle* must in fact be much older.

²² This is the original quotation: “Podemos sospechar de la influencia de Aristóteles en el terreno de la biología y la botánica a partir del Renacimiento. Porque *margarita* en latín siempre significó perla, pero resulta que Aristóteles, en su tratado de las plantas, usa la palabra para referirse a una planta de Egipto. Quizá sea el origen de esa translación semántica. Porque la flor que llamamos *margarita*, según distintas variedades, se podía llamar en latín *bellis*, *aster* o *amellus*.”

²³ Cf. Cf. “at in meridiano orbe praecipuam optinent nobilitatem syagri proximamque margarides. hae breves, candidae, rotundae, acinis quam balanis similiores, quare et nomen a margaritis accipere.” (In the southern part of the world the kind called in Greek, the Dates called *Syagri* are held in the highest repute, and next to them rank those which are called *margarides*. The latter is a short, rounded fruit of a white colour, more like a grape than a Phoenician date, for which reason it has also received the

semantic shift that we are looking for, but it is similar to the flower naming metaphor.

Finally, in the *Projet Babel*²⁴ we can find the enunciation of three possible semantic motivation processes for the semantic shift: 1) the white petals or the small yellow middle flowers (without petals) evoke pearls, 2) the jewel most commonly made with pearls used to be a small brooch – easily made by gathering the pearls by means of a thread – which had the shape of a daisy, 3) the pearl necklace, a gift of love *par excellence* (let us not forget that the mother-of-pearl shell was the cradle and the symbol of Aphrodite), was used as a rosary for the rhyme “I love you, lots, passionately, madly, not at all”: the flower would then have been the “pearl necklace of the poor”.

In sum, though we cannot exactly locate the origin of the semantic shift, it seems plausible to postulate that it took place in French before the 16th century, and that many languages borrowed the new meaning of the French word *marguerite* to their own pre-existing cognates, and some other languages borrowed the French loan in other languages. The spreading of the ‘new’ flower name was unquestionably well-succeeded, but it is also interesting to find out the semantic role that each language will assign to the French loan.

Romance languages

In this section, we will present a survey of five Romance languages. The order of presentation (i.e. French, Italian, Galician, Portuguese and Romanian) has been decided over the assumption that the semantic shift of the French *marguerite* was decisive for the spreading of the cognate words in these languages, following their geography. However, this survey also considers the names that each language had in use before the introduction of the loan from the French *marguerite*, some of which are still used.

name *margaritis* (here Plinius means that the name *margaritis* is owing to fact that the fruits of the plant *margarides* resemble (in shape or size) pearls).

²⁴ Cf. projetbabel.org/forum/viewtopic.php?t=9276 (June 2018).

FRENCH²⁵

Two names are available for ‘daisy’ in contemporary French: *pâquerette* and *marguerite*. They are not synonymous: the classification by Linnaeus (1735) fixed *pâquerette* as the common name for *bellis perennis* and *marguerite* as the common name for *leucanthemum vulgare*, but the distinction was probably set by the botanist Tournefort (1694). Historical dictionaries, such as [Furetière 1690] / [Basnage 1701], acknowledge this distinction:

Marguerite

subst.fem. Sorte de plante dont il y a plusieurs especes. Celle que Mr. Tournefort appelle *Leucanthemum vulgare*, a une racine fibreuse, rampante, acre de goût: elle pousse plusieurs tiges à la hauteur d’environ un pied, pentagones, solides, rameuses, accompagnées de beaucoup de feuilles oblongues, grasses, dentelées. Ses fleurs sont rondes, belles; radiées, de couleur jaune en dedans, mais couronnées de feuilles blanches, soutenues par des calices qui sont des especes de calottes composées de plusieurs feuilles en écailles, & qui ont le bord noirâtre. Cette plante est fort detersive & fort aperitive, ou en fait prendre la tisane à ceux qui crachent du pus. C Bauhin l’appelle *bellis sylvestris, cause foliofo major*.

Pâquerette

s.f. Sorte de plante qu’on appelle en Latin *bellis*, & dont il y a plusieurs especes. Celle qu’on nomme petite paquerete sauvage, en Latin *bellis sylvestris minor* pousse quantité de feuilles, un peu grasses, veluës, oblongues, arondies vers leurs extremité, dentelées fort legerement. Il s’éleve d’entr’elles plusieurs pedicules menus, ronds, qui soutiennent chacun une fleur radiée dont le milieu est jaune, & le tour de couleur blanche or rouge. Ses racines sont des fibres deliées

Quite surprisingly, contemporary dictionaries fail to acknowledge the distinction: [TLFi] describes *pâquerette* as a “plante vivace de petite taille qui fleurit dans les prés, les gazons aux environs de Pâques; fleur de cette plante, blanche (ou rosée) à coeur jaune, rappelant la fleur de marguerite”, and *marguerite* as a “Plante à fleurs de la famille des Composées, à pétales généralement blancs et à coeur jaune. / (Grande) *marguerite* ou *marguerite des prés* / (Petite) *marguerite*. Synon. de *pâquerette*. The dictionary of the [Académie Française 1694] endorses

²⁵ The section on French was written by Geoffrey Williams.

the same equivalence: “*Pâquerette*. Sorte de marguerite blanche qui pousse dans les prés vers le temps de Pâques.”

Another interesting issue regards the etymology of *pâquerette*. Many authors invoke a link to *Pâques* ‘Easter’. According to Furetière/Basnage [Furetière 1701], “elle est appelée paquerete, ou paquette, parce qu’elle fleurit vers le temps de Pâques.” The [TLFi], the [Académie Française 1694] and the [Petit Robert 2019] also claim that the word comes from *Pâques*, through the Middle French adjective *pasqueret*, that meant ‘related to Easter’ and the suffixe *-ette*. Other authors suggest another etymological link. [DECHALF], followed by [Littré], refutes the link to Easter by saying “Mais ce ne peut être la cause du nom de la plante, puisqu’elle fleurit à peu près toute l’année”. Instead, he suggests that *pâquerette* is related to “l’ancien français *pasquierette* qui vient de *pasquier* («pâquis, pâturage»), avec le suffixe *-ette*. La fleur serait ainsi nommée parce qu’elle parsème nos prairies.”

The second hypothesis seems more plausible. *Leucanthemum vulgare* blooms from late spring to autumn and *bellis perennis* generally blooms from early to midsummer, which means that blooming is not restricted to the Easter period that may range from mid-March to mid-April. The Latin verb *pasco*, *pascere*, that [Lewis & Short] translate into ‘to cause to eat, to feed, pasture’ provides a plausible source both formally and semantically, since these little flowers grow spontaneously in short grass and lawns. The repetitive nature of the definitions and the etymology in French shows more a continuing lexicographical tradition where ‘simple’ words are copied from one dictionary to another than a real lexicographical analysis. It may simply be that lexicographers find such words beneath their attention and not worthy of deeper analysis. As such, the received wisdom is carried forward and not questioned.

According to the [TLF], the Ancient Greek/Latin meaning of ‘pearl’ was preserved by the form *margerie* (attested in 1130-40), later *margarite* (late 12th century – early 13th century) and *marguerite* (1340), and it gained the right to posterity in the expression *geter sa margerie entre les porciaux*, attested in 1180-90, and later translated into *jeter des perles aux pourceaux* for the translation of the biblical text (cf. Matthew VII.6). Otherwise, the ‘pearl’ meaning was lost

in Middle French and it gave place to the metaphorical adaptation to the flower name, attested since the 13th century (*flors des margerites* – Aucassin et Nicolette, éd. M. Roques, XII, 25). Still according to the [TLF], *pâquerette* is a much more recent word, attested only in 1553 (cf. P. BELON, *Observations*, III, 52), although of course it may well have been in use before. We do not have the means to understand why this new name was introduced, so we may wonder that it corresponded to a botanical distinction (Tournefort (1694)'s treaty is more than a century away). Anyway, Furetière/Basnage seem to suggest that *marguerite* has a wider scope (cf. “sorte de plante dont il y a plusieurs especes”), and *pâquerette* is a particular plant (cf. “sorte de plante qu'on appelle en Latin *bellis*”), but posterity would bring all sorts of reinterpretations.

Finally, there is a neat distinction between *marguerite* and *pâquerette*, since only the last one is phraseologically rich:

- *aller aux pâquerettes* ‘go to pick daisies; in football, said of a goalkeeper who fails to stop the ball, let something pass’
- *au ras des pâquerettes* ‘vulgar language or behaviour’
- *cueillir des pâquerettes* ‘go picking daisies’
- *envoyer aux pâquerettes* ‘sent to pick daisies, meaning the goalkeeper is sent to get the ball after having failed to stop it’

ITALIAN²⁶

According to [Ragazzini], Italian has two equivalents to the English word ‘daisy’: *margherita* and *pratolina*. The archaic word *margherita* (or *margarita*) – stated as such since the 1552 edition of [Calepino] and present in this form until the first edition of [Crusca 1612] – is a noun of Latin origin (borrowed from Ancient Greek) that has preserved the original meaning ‘pearl’ as the exclusive one, at least until the end of the 17th century.

The ‘pearl’ meaning has certainly lasted longer than in French and even contemporary dictionaries still number it among the possible definitions. The

²⁶ The section on Italian was written by Elisa Corino.

bilingual [Ragazzini], for instance, includes it as the third equivalent of the English ‘daisy’:

3 (slang antiq. o USA) persona o cosa eccezionale; gioiello (fig.)

But this is not only the case of bilingual dictionaries. The meaning, metaphorical use and phraseology related to gems (*margherita* = *perla* ‘pearl’) have been part of the definition since 1500 (see, for instance, [Calepino]), and all the five editions of *Vocabolario dell’Accademia della Crusca*, from 1612-1923).

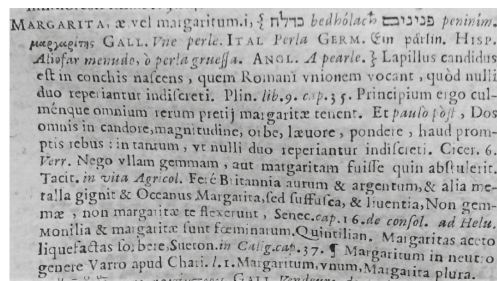


Figure 2 – *margarita* in [Calepino]

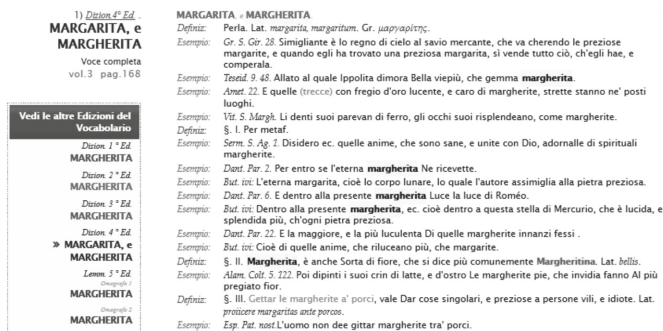


Figure 3 – *margarita* in [Crusca 1729-38]

The examples usually quote literary passages from 1200 on, where the word corresponds either to the Latin cognate of Greek origin, as in the *Vita di Santa Margherita* (Testo a penna di Francesco Marinozzi Accademico della Crusca 1300):

Li denti suoi parevan di ferro, gli occhi suoi risplendeano, come margherite²⁷

²⁷ His teeth looked like iron, his eyes were glowing, as pearls (*margherite*).

[Crusca 1612]

or in *Il Tesoretto* (Brunetto Latini 1260 circa):

Tesoretto. 3. 13. *Vidi... E pietre e margherite, Che son molto gradite.*²⁸

[Tommaseo-Bellini 1861]

or to its metaphorical use, as in Dante's *Paradiso* (cant. 6), where *margherita* means 'sky' (*cielo*)

E dentro alla presente margherita.

[Crusca 1612]

The reference to the flower consistently enters dictionary articles from the [Crusca 1691]. Before that date, the only occurrence of *margherita* as a flower is to be found in Florio's Italian-English dictionary of 1591.

Margarita, a pearl, a margarite, a gem. Also a flower called a daizie

It is interesting to notice how the structure of the dictionary entry has not really changed over time, and the flower meaning has only recently been moved up to the first position of the article. The following table compares three different monolingual dictionaries, thus demonstrating the persistence of a standard order of the different meanings: 1. Latin cognate pearl; 2. Metaphorical use; 3. reference to the precious value of a person or an object; flower.

²⁸ I saw... and stones and pearls (*margherite*), which are most welcome.

	[Crusca 1863-1923]	[Tommaseo-Bellini 1861]	[Zingarelli]
PEARL	Sost femm. Lo stesso che Perla . Dal lat. Margarita, e questo dal Gr. μαργαρίτης.	. S. f. Aff. al lat. aureo Margarita. Perla . Gr. S. Gemma Gir. 28. (C) Simigliante è lo regno del cielo al savio mercante, che va cherendo le preziose margarite, e quando egli ha trovato una preziosa margarita, si vende tutto ciò ch'egli hae, e comperala. [...]	f. μαργαρίτης. Perla . Margarita. Perla . Gr. S. Gemma
METAPHORE (celestial body)	E Figuratam	Trasl. Dant. Par. 2. (C) Per entro sè l'eterna margherita Ne ricevette. But. ivi: L'eterna margherita, cioè lo corpo lunare, lo quale l'autore assomiglia alla pietra preziosa. [...]	
METAPHORE (for precious people or objects)	Pur figuratam., detto di Donna che fra le altre prevale per eccellenza e rarità di pregi.	Detto di Persona molto cara e pregevole. Non com. Fir. Lett. Donn. Prat. 230. (C) Ed ecci chi non si è vergognato di volere che una delle belle giovani di Prato, modesta e gentile, anzi veramente una preziosa margherita... [...]	Cosa o persona preziosa come perla o gemma
PLANT or FLOWER	[...] <small>È VIII. Margherita, è pur nome di una Pianticella persona, che trovai dappertutto nei prati e nei luoghi erbosi, ed altresì del Fiore che essa produce sul fair dell'incenso. La specie più comune dà fiori con petali bianchi e corolla gialla. Dal tempo in cui fiorisce dicesi pure Primavera e Fiore di primavera, o Primo fiore; e dai luoghi in cui s'incontra, Pratolina. Dicesi anche Margheritina, ed è la Bellis perennis dei Botanici. - Alam. L. Colt. 5. 611: Poi dipinti i suoi crin di latte e d'ostro Le margherite più che invidia fanno Al più pregiato fior ecc. Nodde. Op. 2. 228: Le margherite, chiamate Belle e Belline, fanno ordinariamente nei prati, ove se ne ritrovano delle bianche brizzolate e delle rosse, doppie e semplici, tutto senz'odore.</small>	[...] Margherita. (Bot.) [D.Pont.] Sorta di fiore , che dicesi più comunemente Margheritina (Bellis perennis, L.) . Alam. Colt. 5. 122. (C) <i>Poi dipinti i suoi crin di latte e d'ostro Le margherite pie, che invidia fanno Al più pregiato fior.</i>	Pianta delle composite, coltivata nei giardini per ornamento: Margheritona (leucanthemum vulgare)

Table 1 – [Crusca 1863-1923], [Tommaseo-Bellini 1861] and [Zingarelli]

In contemporary dictionaries, it is just the other way round, with the reference to the flower coming first, and the pearl and its figurative meaning second (herb – *erba* – and pearl – *perla*).

◆margherita / marge'rita/ o †margarita

[lat. margarīta(m), dal gr. margarītēs, di orig. orient., che aveva già i due sign. di 'perla' e 'fiore'; nel sign. B, dal n. di Margherita di Savoia, regina d'Italia (1851-1926), alla quale quelle specialità gastronomiche furono dedicate ☼ 1300]

A s. f.

1 erba perenne delle Composite con grandi capolini isolati costituiti da un bottone giallo al centro e linguette bianche disposte a raggiera (**Leucanthemum vulgare**) | margherita gialla, fiorrancio | sfogliare la margherita, staccare i petali uno a uno accompagnandovi una filastrocca a domande alterne per ottenere risposta; (fig.) essere incerto, titubante sul da farsi
2 †perla, gemma | (est.) †cosa o persona preziosa come una gemma | †stella, astro [Zingarelli]

In fact, a corpus-based research can easily prove that the Latin cognate has progressively been dropped in favour of the other use. A quick query of the corpus *La Repubblica*²⁹ proves that none of the 254 occurrences correspond to the 'pearl' meaning, and even excluding proper names of people and pizza, a fair amount of the results refers to the flower.

Some present-day sources (see for example [De Mauro] or [Sabatini-Coletti]) mention the diminutive form of *margherita* – *margheritina*, as another 'daisy' name, basically a synonym. In fact, *margherita* seems to be an 'umbrella term' to point to different sorts of flowers, although the dictionaries do not offer precise definitions and uses, which are probably strongly influenced by diatopic variables as well. The AIS³⁰ gives evidence that the word *margherita* is used as such more in Southern Italy, and we can find a more variegated use in the North of the country, with more dialectal varieties.

²⁹ Corpus of Italian newspaper texts published between 1985 and 2000, approximately 380M tokens.

³⁰ The *Linguistic and Ethnographic Atlas of Italy and Southern Switzerland* was conceived by the Swiss linguists Karl Jaberg and Jakob Jud. It contains 1705 digitalised maps of the data collected in the middle of the 20th century.

are much higher than the ones for *pratolina*. What is more, Il Nuovo de Mauro labels *margherita* as AD (Alta Disponibilità – Highly available), whereas *pratolina* is referred to as TS (Tecnico Specialistico – Technical and Specialized). The same label is given to the direct descendent of the Latin name, *bellide*, which is the term defining the botanical species with its peculiarities and, as De Mauro states, *margheritina* (and not *margherita*!) is one of its hyponyms. So, there are evidences that the two sets are not fully equivalents and that there is a certain amount of insecurity in defining the term and identifying its referents.

GALICIAN³¹

Though Galician is an old language, Galician lexicography is quite recent. It began, like many other languages, with bilingual dictionaries, but the early bilingual Galician dictionaries dealt only with Castilian. Bilingual dictionaries that pair Galician with other languages have only appeared in the 20th century. This was due to well-known political and sociolinguistic reasons in the context of the history of the Galician language. Furthermore, parity between the languages in bilingual dictionaries is absent when these languages are Galician and Castilian, that have a very different history: Castilian has an impressive lexicographical history³² and a prestigious Academy, as well as an excellent *corpus* of bilingual dictionaries, whereas Galician was not standardised and normalised until after 1980, and, unlike Castilian, does not have a fully fixed lexicographical *thesaurus*.

Furthermore, Galician speakers are bilingual in Castilian. For that reason, bilingual dictionaries between these two languages, spoken in the same community, have a role that goes far beyond the mere facilitation of equivalence between them both: it is about dignifying the minority language – the potential user *stricto sensu* is subtly relegated to the background. After the approval of the Statute of Autonomy of Galicia in 1981, the Real Academia Galega, the Instituto da Lingua Galega, and the University of Santiago de Compostela were assigned the task of studying the Galician language. In 1982, they published the *Normas*

³¹ The section on Galician was written by Ignacio Vázquez.

³² [Covarrubias], the first monolingual Castilian dictionary, was published in 1611.

*ortográficas e morfolóxicas do idioma galego*³³, sanctioned by law in 1983. These standards were the first historical attempt to normalize Galician and they have had an important effect on the creation of (monolingual or bilingual) dictionaries, in recent times. Therefore, Galician lexicographical production before 1982 (e.g. [Olea]) must be distinguished from the post-1982 rules production (e.g. [DGCCG] written according to the rules in force today and published in 1982).

On the other hand, it can be said that Galician monolingual lexicography is generated from bilingual dictionaries created after 1982. These dictionaries only appear when normative bilingual lexicography has been fully established (cf. Vázquez 2006):

- a) a total of twenty-three works were published during the non-normative period (1536 – 1982): two glossaries in the 16th century, three glossaries in the 18th century and eighteen bilingual dictionaries in the 19th century (the first of which in 1863 – it is considered very late compared to other languages).
- b) one hundred (monolingual and bilingual) dictionaries have been published during the normative period (1982 to the present); and *all dictionaries* follow the perception of the academic dictionary.

In summary, to overcome the lack of a monolingual Galician dictionary prior to [Estraviz 1983], we must take into account the existing linguistic *corpora* – one of which is a *compendium* of dictionaries. Therefore, the information on the Galician equivalents for ‘daisy’ will, perhaps, be different from those in other languages. It should also be noted that the words consulted and currently referred to as ‘daisy’ in Galician come from two studies on botany: [NVFVG] and Silva-Pando *et alii* (1996).

Starting with the fundamental problem, people use many words as synonyms referring to the common flower, all of which are not taxonomically of the species *Bellis perennis*. The words are: *belorita* ~ *bilorita* ~ *velorita* ~ *vilorita*, *benmequer* (*ben me quer*), *bonina*, *margarida* ~ *margarita*, *parramina*, *ponmerendas*, *primachorro* and *quitamerendas*. All of these words are alive and in use today (with different peculiarities).

³³ Spelling and morphological rules of the Galician language (our translation).

In [DRAG 2012→], that collects the current standard and normative lexicon, only *margarida* is collected and its variant *margarita* (one refers to the other – they are synonymous in all respects) and only the flower is defined:

<p>(monolingual) margarida PARA TODAS AS ACEPCIÓNS SINÓNIMO <u>margarita</u> substantivo feminino 1 Planta herbácea da familia das compostas, que bota flores de pétalos brancos e centro amarelo e da que existen diversas especies. <i>As margaridas cubrían o muro do xardín.</i> 2 Flor desta planta. <i>Un ramo de margaridas.</i> 3 por extensión Calquera flor semellante á margarida. <i>Gústalles moito as margaridas.</i></p>	<p>(monolingual) margarita substantivo feminino_ <u>Margarida</u> <i>Levaba unha margarita na lapela.</i></p>
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Table 2 – margarida in [DRAG→]

The third meaning of *margarida* (i.e. ‘by extension – any flower similar to the ‘daisy’’) is interesting. Therefore, the meanings deal with the problem of taxonomic denominations.

Nothing is said about the other entries. In order to find out the ancestry of all the current words for ‘daisy’, we have consulted [TMILG]³⁴. Only four records of *margarida* or *margarita*, used as a female proper noun, are found. There is no record of the other words. We have also searched [DdDGM]³⁵. It only has two records of the word *margarida* as a female proper noun³⁶. These results can be better understood considering that, due to the pressure of Castilian, Galician is practically not used in writing from the end of Middle Ages to the 19th century *Rexurdimento*³⁷. There is very little information from those three hundred years, only some texts and glossaries are available. The texts have been compiled

³⁴ [TMILG] registers texts from 700 to 1600 (notarial prose, non-notarial prose and verse).

³⁵ This is an electronic multidictionary that compiles fourteen glossaries and vocabularies elaborated from Galician textbooks or medieval text collections or belonging to the common Galician-Portuguese tradition.

³⁶ The records appear in the ‘Onomastic Index’ of the translation of *La traducción de la Crónica General y de la Crónica de Castilla* by Ramón Lorenzo (1977).

³⁷ *Rexurdimento* ‘resurgence’ refers to a period in the history of Galicia, in the 19th century. Its central feature was the revitalization of the Galician language as a vehicle of social and cultural expression after the so-called *séculos escuros* ‘dark centuries’, in which the dominance of Castilian Spanish was nearly complete.

in [GONDOMAR]³⁸; the glossaries, together with the first dictionaries, can be consulted in the [DdD]³⁹. In [GONDOMAR], *margarida* (proper noun) occurs twice, in 1596 and in 1755. The other denominations are not logged. In [DdD], *belorita*, *bilorita*, *velorita*, *vilorita*, *ponmerendas* and *benmequer* are not collected in any dictionary. The remaining words have the following records:

Bonina is registered in three dictionaries:

- 1- (bilingual) *Bellis perennis* L. Bonina. Pequeña planta campestre parecida a la manzanilla, que produce unas florecillas a las que se da el mismo nombre. [RAG]
- 2- (bilingual) Manzanilla loca, planta campestre que produce unas florecillas que reciben su mismo nombre. Rodríguez González, [DEGC 1958-1961]
- 3- (bilingual) Manzanilla loca. [DGC 1972]

Margarida is registered in twelve dictionaries. Some examples:

- 4- (bilingual) Margarita. [DDG]
- 5- (bilingual) Margarida = Margarita. [VGC]
- 6- (bilingual) Planta maya. V. BELLORITA. [DG 1876]
- 7- (bilingual) (*Bellis perennis*). Margarita, Bellorita, Maya; planta de raíz vivaz comunísima en todos los campos y perteneciente á las asteróideas, familia de las compuestas de Decandolle: florece de febrero á setiembre y su flor se compone de un disco amarillo con cintillas blancas. [DGC 1884]
- 8- (bilingual) Margarita, bellorita. [VPCG]
- 9- (bilingual) Margarita. [DGC 1928-31]
- 10- (bilingual) Margarita. [DGC 1951]
- 11- (bilingual) V. Pérola. Bellorita, planta. [DGC 1933]
- 12- (bilingual) Margarita, bellorita. [DGC 1979]
- 13- (bilingual) Margarita. [DGRGC]
- 14- (bilingual) Planta herbácea de la familia de las compuestas, que es común en todos los campos de Galicia. Florece esta planta de Febrero a Septiembre; su flor es un disco amarillo con cintillas blancas alrededor, y como durante todo el verano está floreciente bajo los árboles, las gentes campesinas la conocen por frol merendeira y ponmerendas, porque los trabajadores meriendan a media tarde, antes de ponerse el sol, por ser los días más largos y las labores más fatigosas. [DEGC]
- 15- (bilingual) Planta herbácea de la familia de las compuestas. [DGC 1972]

³⁸ Eighty-three texts; the oldest from 1594 and the most recent from 1791.

³⁹ Thirty-two works (from the beginning of Galician lexicography in the 18th century to the present). It includes the twenty-three referred to above and the two botanical works.

Margarita is mentioned in one study (García González 1985) but not in any dictionary. *Parramina* is registered in two dictionaries. In both, it is marked with a label that circumscribes it to a specific area (Caurel):

16- (bilingual) Primavera, bellorita, hierba perenne. [DGC 1972]

17- (bilingual) Primavera, bellorita, hierba perenne. [DGC 1979]

And *quitamerendas* is recorded in a study (cf. Martín Sarmiento 1746-1755) and in two dictionaries:

18- (bilingual) Quitameriendas nombre vulgar de la planta merendera, de la familia de las liliáceas. [DEGC]

19- (bilingual) Quitameriendas, nombre vulgar que se da a la planta merendera de las liliáceas. [DGC 1972]

In the computerized [TILG]⁴⁰, we can find the following number of records for these words (the remaining are not attested):

	19 th century	20 th century
<i>belorita</i>		7
<i>bonina</i>		1
<i>margarida</i>	25	63
<i>margarita</i>	3	29
<i>ponmerendas</i>		1
<i>quitamerendas</i>		4

Table 3 – Distribution of Galician ‘daisy’ names in [TILG]

⁴⁰ This historical corpus gathers 1958 texts from the 17th century to 2013 (4 from the 17th century, 21 from the 18th century, 505 from the 19th century and 1421 from the 20th century and 21st century).

Finally, in the [CORGA]⁴¹, we find the following results:

	> 1975
<i>belorita</i>	2
<i>ben me quer</i>	1
<i>margarida</i>	15
<i>margarita</i>	8

Table 4 – Distribution of Galician ‘daisy’ names in [CORGA]

Many dictionaries have been recently published, in conjunction with the work of the Real Academia. We have considered two, since the other present no different data. In the first one, only two entries are collected, *margarida* and *quitamerendas*:

20-_(monolingual) *margarida* (lat. *margarita* < gr. *margarites* = perla). s. f. Planta composta con flores de pétalos brancos ligados a un centro amarelo. [DXL]

20-_(monolingual) *quitamerendas* (de *quitar* + *merendas*) s. m. Herba silvestre que ten unha flor azul de pequeno tamaño. [DXL]

In the second dictionary, we have found:

21-_(monolingual) *margarita* s. f. [Estraviz 2005→]

BOT. O mesmo que *margarida*.

21-_(monolingual) *margarida* s. f. [Estraviz 2005→]

BOT. Planta da familia das compostas con capítulos de flores liguladas, brancas e com um pecíolo ancho com flósculos amarelos, é espontânea e floresce todo o ano menos no inverno. Também é conhecida por *belorita*, *bonina* e *bem-me-quer* (*Bellis perennis*). As flores desta planta.

[gr. *margarites*, lat. *margarita*]

Given the fact that [Estraviz 2005 →] offers a number of alternative names for *margarida*, we have also looked them up in this dictionary:

21-_(monolingual) *belorita*

BOT. Planta da familia das compostas, o mesmo que *margarida* (*Bellis perennis*).

21-_(monolingual) *bonina*

Pequena flor campestre parecida à macela. *Margarita* (*Bellis perennis*).

21-_(monolingual) *bem-me-quer*

⁴¹ This contemporary corpus gathers texts from 1975 to the present.

It is not collected.

The combination of all these informations yields the following summary:

botanical sources	lexicographic sources	textual sources
<i>margarida</i>	15	213
<i>margarita</i>	2	40
<i>bilorita, velorita, vilorita</i>	1 (<i>belorita</i>)	9 (<i>belorita</i>)
<i>quitamerendas</i>	1	4
<i>bonina</i>	4	1
<i>benmequer</i>		1 (<i>ben me quer</i>)
<i>ponmerendas</i>		1
<i>parramina</i>	2	
<i>primachorro</i>		

Table 5 – Distribution of Galician ‘daisy’ names in lexicographic and textual sources

Though the scarcity of the data is a serious shortcoming for the description of Galician, the information that we have gathered suggests that the universal and standard word for ‘daisy’, in Galician, is (and has been since the Resurximento) *margarida* (with its variant *margarita*, although with fewer records in the corpora, and certainly under the influence of Castilian). *Margarida* is the only word listed in the [DRAG1982→], and this is a tendency that prevails also in other languages.

Nevertheless, we have been able to trace other names that come across the path of ‘daisies’ in Galician. The first interesting note regards the preservation of a (graphically unstable) word – *belorita* – related to the Latin noun *bellis*. Two other attested words (i.e. *bonina* and *benmequer*) are also attested in Portuguese, as mentioned in the following section. *Quitamerendas* (registered in three dictionaries ([DEGC], [DGC 1972] and [DXL]) and *ponmerendas* (without its own entry but named in 14) are clearly of expressive origin. *Parramina* (registered in two dictionaries ([DGC 1972] and [DGC 1979]) without registers in the corpora) and *primachorro* (without entry in the dictionaries or registers in the corpora) indicate, in spite of the lack of diatopic information in the works, a geographical restricted use.

The four words respond to the desire to collect the largest number of entries in dictionaries, a trend verified in Galician lexicography until the 90s.

To conclude, it is important to say that although the flower names presented above are all related to ‘daisy’, it is a fact that they are not always the referent of the botanical species *bellis perennis*. Other flowers, such as ‘primrose’ or ‘camomile’ are also mentioned, but this confusion of names is not a specificity of Galician, it is rather common-place in its neighbouring languages (and also those further afield) languages.

PORTUGUESE⁴²

Though *margarida* is the only equivalent for ‘daisy’ offered by [INFOPEDIA I-P], native speakers know that other names, that can be retrieved in monolingual dictionaries such as [INFOPEDIA], are possible choices:

bem-me-quer

designação comum, extensiva a diferentes plantas da família das Compostas, que se destacam pelas flores de pétalas brancas, amarelas ou alaranjadas, também conhecidas como **malmequer**, **margarida**, etc.

bonina

1. designação comum, extensiva a qualquer pequena flor silvestre
2. (*Bellis perennis*) planta herbácea, da família das Compostas, espontânea em Portugal, tem folhas de margens serradas e capítulos de flores liguladas, brancas, vermelhas ou variegadas; **margarida**
3. (*Calendula officinalis*) planta herbácea, da família das Compostas, tem folhas oblongas e flores em capítulos, de cor laranja ou amarela; calêndula

malmequer

planta da família das Compostas, de capítulos grandes, espontânea no Centro e no Sul de Portugal, também chamada **pampilho**; **bem-me-quer**

margarida

planta da família das Compostas, com capítulos de flores liguladas, brancas, espontânea em Portugal, e também conhecida por **bonina** e **bem-me-quer**; **margarita**

⁴² The section on Portuguese was written by Alina Villalva.

margarita

ver **margarida**

pampilho

nome vulgar extensivo a várias plantas (em especial à também chamada **malmequer**), da família das Compostas, algumas das quais muito frequentes em Portugal

It is not that easy, if even possible, to understand which is the proper meaning of each of these words and the resulting interconnections between them are quite intricate. Nevertheless, *margarida* seems to be at a focal point, which requires some further research since, as we will see below, ‘flower name’ is a quite recent meaning for that word in Portuguese:

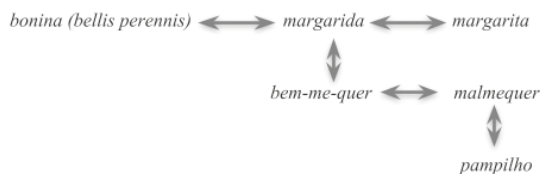


Figure 6 – Interconnections of Portuguese ‘daisy’ names in [INFOPEDIA]

The following diachronic frequency table shows the usage of these words since the 13th century (cf. [CdP]). This corpus gathers documents since the 13th century, but none of the above mentioned names occur before the 16th century, a fact that is open to many interpretations⁴³:

⁴³ Maybe this is a consequence of the nature of the *corpus* or of the scarcity of available written documents; maybe the speakers felt no need to name these small wild flowers, or they just referred them as *florzinhas* ‘little flowers’, a word that [Pereira] lists as a main entry (cf. “Florsinha. Flosculus, i.”).

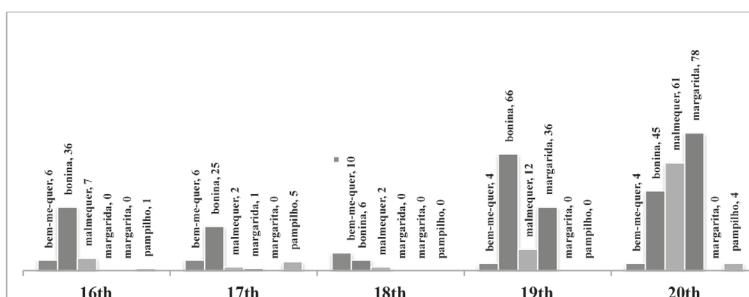


Table 6 – Distribution of Portuguese ‘daisy’ names in [CdP]

The overall observation of these data highlights that *margarita*, as a flower name, has never been used⁴⁴ and *pampilho* was and still is very rarely used. *Bonina* had a dominant position in the 16th and the 17th centuries, which decayed in the 18th century, and, in the 19th and 20th centuries, its usage was dominantly retrieved by literary texts. Furthermore, *bem-me-quer* and *malmequer* were almost evenly used in the 16th century. The use of *bem-me-quer* has slightly increased until the 18th century, and then it became a rarely used word, whereas *malmequer* became more and more popular along the 19th and the 20th centuries. Finally, we may see that, as a flower name, *margarida* is only documented in the 19th century, becoming increasingly dominant until the present time. In sum, we may say that *bonina* dominated until the 17th century, *bem-me-quer* prevailed along the 18th century, *margarida* took the lead from the 19th century onwards, and *malmequer* became almost as salient in contemporary European Portuguese, at the same time.

This frequency analysis assumes that all these words are synonymous, but the assumption is probably insufficiently grounded. We will take a look at the etymology of these words and their lexicographic registers in order to find out more about their meaning.

According to [DELP₂], *bonina* is a Castilian loan, probably related to the Latin adjective *bonus*, meaning ‘good’. It is worth noting that [DELL] mentions

⁴⁴ The word occurs, not very frequently though, but with the meaning ‘pearl’, or as a proper noun, or, more recently, as the name of a ‘drink’. Records of *margarita*, meaning ‘pearl’ or ‘flower name’ in contemporary dictionaries are merely a lexicographic revival.

that “de *bonus* existe un diminutif familier, employé à toutes les époques: *bellus*” and he also claims that “les langues romanes ont isolé *bonus*, *bene* et *bellus*, qui étaient étroitement liés en latin et qui sont devenus trois mots distincts: fr. *bon*, *bien*, *beau*”. This is particularly interesting because, in the entry *Bellis*, *-idis*, [DELL] refers “marguerite (Plin.). Dérivés de *bellus*? Cf. κάλλυντρον⁴⁵, Arist.”. If, in fact, there is an independently established link between *bellis* and *bonus*, then we may admit that the Iberian wild flower⁴⁶ name *bonina* is closely semantically related to the Latin wild flower name *bellis*⁴⁷.

Portuguese heritage dictionaries (cf. [Cardoso], [Barbosa], [Pereira] and [Bluteau]) consistently translate *bonina*(s) into the Latin word *flosculus* ‘little flower’. The same meaning is purveyed by the explanation in Portuguese, whenever it is given (cf. [Bluteau]: “flores mais pequenas”, i.e. ‘smaller flowers’; [Morais 1813]: “Florzinha [...] do campo”, i.e. ‘small wildflower’) and they are also positively evaluated, somehow bringing back a semantic connection to their etymon (cf. [Bluteau]: “flores [...] mais mimosas”, i.e. ‘prettier flowers’; [Morais 1813]: “Florzinha mimosa”, i.e. ‘pretty small flower’). [Figueiredo] is the first to present an equivalent that he does not define (i.e. *margarida dos prados*, i.e. ‘meadow margarida’) and he also indicates that *bonina* is a hyperonym of *bem-me-quer*. Apparently, these meanings are [Figueiredo]’s invention, since until then *bonina* was a generic name for small and nice wildflowers, but contemporary dictionary makers decided to fully explore [Figueiredo]’s innovation, as we have seen in the above [INFOPEDIA]’s

⁴⁵ [‘kal:undron] goes back to a root *kal(l)-* ‘beautiful, good’ (cf. AG *καλός* [ka’los] ‘beautiful, good’) and in the case of Aristotle it refers to a kind of an (unknown to us) shrub (or flower). Thus, the [DELL] is establishing a parallel between a Latin term and an AG one that were both formed from a root meaning ‘good, beautiful’.

⁴⁶ [RAE 1726] registers *bonina* as the “hierba que se parece a la manzanilla, de flores blancas y amarillas. Lat. Chamamelonis”

⁴⁷ [DRA] registers the word *bonina* as a modifier of *abóbora* ‘pumpkin’ (cf. A *abóbora bonina* é chamada *abóbora bolina* (por dissimilação e influência de *bola*?) e *abóbora menina* por etimologia popular. Minho. Mas onde se acha o *bonina*? V. **abóbora**.) Vasconcelos admits that *bonina* is a phonetic variant of *bolina*. This is equally a mysterious word, but phonetically closer to *belo*.

entries). A final note, still related to *bonina*, is suggested by the entry *pratun* in [Pereira], which he defines as “O Prado, o campo de boninas, ou de feno”. The reference to *prado* ‘meadow’ suggests a semantic relationship to the Italian ‘daisy’ name *patolina* and to the French *pâquerette*.

Pampilho is a more complex case. According to [DELP₂], its etymology is obscure. The word usage is so scarce that we might just ignore it, but it is plausible to hypothesize the connection to the Quechua word *pampa*, which is the name for ‘meadow’ in South America. This might explain why the word only shows up in the 17th century. And we might, again, also recognise a semantic connection between *pampilho*, the French *pâquerette* and the Italian *patolina*. Early dictionaries (cf. [Cardoso], [Barbosa], [Pereira], [Bluteau] and [Morais 1813] present *pampilho* as an herb, but they don’t agree on which one: *heliotropium* (and *tornasol*, in the translation of the Latin word into Portuguese) for [Cardoso]; *buphtalmus* for [Barbosa], [Bluteau] and [Morais 1813], either in Latin or in the Portuguese translation (i.e. *olho de boy*; *olho de boi*)); and *buphtalmus*, *chrysanthemum* and *cachia* for [Pereira]. [Morais 1813] registers a surprising equivalence to “uma espécie de parietária” (i.e. ‘a kind of parietary’) and, as usual, [Figueiredo] innovates: though he provides no sources, he mentions two graphic alternates (i.e. *pampílio* and *pampillo*) and he finds three subspecies (i.e. *pampilho aquático*; *pampilho espinhoso*; *pampilho marítimo*). The most consensual interpretation brings *pampilho* close to *būphthalmos*, apparently because the flower resembles the eye of an ox (cf. [Pereira]). [Bluteau] mentions briefly that the flower is yellow (cf. “a flor desta herva he de cor de ouro”).

As mentioned above, contemporary sources (namely [INFOPEDIA]) establish a link between *pampilho* and *malmequer*. [Wikipedia] specifically relates *pampilho* to *chrysanthemum segetum* (one of its common names, together with *erva-mijona*, *malmequer*, *malmequer-branco*, *malmequer-bravo*, *pampilho-das-searas*, *pingilhos*), and also to *coleostephus myconis* (together with *olhos-de-boi* and *pampilho-de-micão*). Such profusion of names and categories, together with such a low frequency in usage, can only mean that, in general, this is not an equivalent for ‘daisy’ or any other precise wildflower name.

Two other names, *bem-me-quer* and *malmequer* (or any other of their graphic variants), are also quite old. They originate in the two first verses of the folk rhyme⁴⁸ (*he/she loves me; he/she loves me not*), sung while picking daisy petals off, one by one⁴⁹, in order to find out the fate of some romantic inclination⁵⁰. *Bem-me-quer*, shared with Galician⁵¹, was never that frequently used in Portuguese. On the other hand, *malmequer*, which is a Portuguese idiosyncrasy, became more frequent, as mentioned above, when *bonina* lost the preference of speakers.

From a semantic point of view, these names seem to fit well with all flowers that allow to play the petal stripping game: [Pereira] mentions *calendula* (“O bem me queres flor: flor de pamposto, ou girassol”), and *chrysanthemum* (Pampilho, ou pamposto herva, ou sua flor bememqueres amarela), that belong to the *asteraceae* family, but he also lists a member of another family, which is *caltha* (“O bem me queres flor, ou flor do pamposto, ou girasol; ou violeta” and “Malmequeres flor. Caltha, ae”). [Bluteau] draws a list of properties of *bemmequères*:

⁴⁸ Cf. footnote 21.

⁴⁹ The syntactic origin of these names is patent in their original forms: *bem me queres* / *bememqueres* / *bemmequères* ‘lit. well-me-you want’; *malmequeres* ‘lit. bad-me-you want’. The verbal inflection (2nd person singular-indicative present) will be lost, in order to get a singular noun (cf. *bem-me-quer*, *malmequer*) formally distinct from the plural (cf. *bem-me-queres*, *malmequeres*).

⁵⁰ [Bluteau] explains and comments the game, but, most interestingly, he tries to identify its origins: “O costume de fazer estas perguntas amorosas às flores se originou, ou de que Venus, & as Graças, suas companheiras se coroão de flores, & o dâr os amantes às amadas capellas de flores, ou ramalhetes, he prova de amor; ou naceo este costume de que a flor; Amarantho, se chama vulgarmente Flor de Amor, & he huma das especies de Bememqueres, com hum botão de ouro no meyo, mas com flores purpuras ao redor.” [Bluteau] argues that the rhyme is either due to the fact that Venus and the Graces use flower crowns and lovers usually offer flowers as a token of their love, or to the fact that one kind of *bemmequeres* is the amaranth, also called the flower of love. Three centuries later, [Bluteau]’s hypothesis are hardly decodable.

⁵¹ Cf. above, the section on Galician.

Flor, que tem hum botão de ouro, com folhas brancas, ou amarellas ao redor, huma diante de outra, tocandose nas extremidades, & com tão certo numero de folhas, que huma não excede, nem falta de outra.⁵²

And he even rehearses a botanical classification:

Caltha, ae. Fem. he o nome do Bemmequeres, que tem folhas amarellas; do Bemmequeres, que tem as folhas brancas até agora não lhe achei o nome⁵³

Furthermore, *s.v. maravilha*, [Bluteau] explains that the description of *caltha* by Dioscorides proves that this is a *malmequeres*, that has a long-lasting flower⁵⁴, and not another different flower, blue and very ephemeral. [Bluteau]’s effort of botanical accuracy is, however, condemned to failure. Before Tournefort (1694), Linnaeus (1735) and all the botanists that have established systematic classifications, the assignment of names to these wild flowers was a pure exercise of speculation.

Unfortunately, lexicographers that could have used the output of scientific advancements failed to do so, as well. [Morais 1813] and [Folqman], for instance, also link *bemmequères* and *malmequeres* to *caltha*. [Figueiredo] seems to be the first one to be aware of botanic categories. Quite wisely, in this event, he decides to classify them as generic terms for *compositae*:

Malmequér m. Nome de várias plantas da fam. das compostas, vulgar em campos e jardins.⁵⁵

Finally, there is *margarida*. Its remote etymology has already been established above, but we need to ascertain how it made its way into Portuguese, probably no sooner than the 19th century though we can find a much earlier lexicographic register, in [Pereira]:

Bellis, is, f. g. vel Bellius, ii, m. g. Casta de herva, ou flor Margarida.

⁵² ‘flower with a golden button surrounded by the same number of white or yellow petals, opposite to each other, touching at the tips’ (our translation).

⁵³ ‘caltha, ae is the name of the Bemmequeres of yellow petals; I have not yet found a name for the Bemmequeres of white petals’ (our translation).

⁵⁴ “Dioscorides assim na estampa, como na descrição da Caltha, mostra que he Malmequeres, cuja flor dura muitos dias”

⁵⁵ ‘Malmequér is the name of many plants of the composite family, common in fields and gardens’. (our translation).

In fact, there is a gap of more than hundred years between [Pereira]’s record and the 19th century attestations in the [CdP]: neither [Bluteau] nor [Morais 1813] include *margarida* in the entry list or elsewhere, as a botanical name. [Fonseca] lists *margarita* and, finally, [Figueiredo] lists them both. Information is thus very scarce. [DELP2] claims that *margarida* is a loan from the French *marguerite*, but we may speculate a bit further. *Margarita* meaning ‘pearl’ is an old word in Portuguese, first attested in the 13th century. The final voiceless stop has probably undergone a voicing process (like many other Latin words, such as *vita* > *vida*), which motivated the graphic alternate *margarida*. The pearl meaning of *margarida* became unused before the 18th century (cf. Table 6), but as a female anthroponym (equally old), the word survived until our present days. The introduction of the flower name meaning, documented since the 18th century, was certainly motivated by the identical meaning of the French *marguerite*, but the form was not borrowed – most probably, this was just a semantic loan.

Finally, it is interesting to note that [Pereira] presents *margarida* as a translation for *bellis*, which is not yet Linnaeus (1735)’ *bellis perennis*, but rather a ‘kind of herb’. [Fonseca] presents *margarita* merely as a flower, and [Figueiredo] evokes the botanical taxonomy presenting both *margarita* and *margarida* as ‘the name of several plants of the *compositae* family’. Finally, for [Priberam], *margarida* and *margarita* are ‘common names for several *asteraceae* plants’; and for [Infopedia], *margarida* is (i) a common noun for several *compositae* plants, (ii) the name for *bellis perennis* and (iii) the name of the flower of some of those plants’. [Wikipedia]⁵⁶ offers the best summary for the random semantic account found in lexicographic sources. They claim that there is no consensus about the usage of the word that presents large variation: *margarida* may refer to any plant of the genus *bellis* (namely, *bellis perennis*, *bonina* or *bela-margarida*, *bellis sylvestris*, or *margarida-do-monte* and *bellis annua* or *margarida-menor*); to *leucanthemum vulgare* or *chrysanthemum leucanthemum*; to *chrysanthemum frutescens*; to *callistephus chinensis* or, *rainha-margarida*; and to *tibouchina aspera*, *quaresmeira*

⁵⁶ Cf. <https://pt.wikipedia.org/wiki/Margarida> (July 2018).

or *malmequer-do-campo* – in other words, *margarida* is the folk name for a wide variety of plants. Therefore, though, as a flower name, *margarida* entered the Portuguese lexicon with a tight semantic link to *bellis*, it subsequently, became a wide range umbrella name for many *compositae*.

In sum, *malmequer* and *margarida* are the best equivalents for the English word ‘*daisy*’, but they are both generic terms for a wide variety of wild flowers typically belonging to the *asteraceae* family. No further semantic distinction is available in Portuguese through common nouns.

ROMANIAN⁵⁷

Bellis perennis is designated in Romanian by a large variety of lexical items, only two of them being captured by the English-Romanian dictionary⁵⁸. Most of these terms are used in specific regions, or even in specific zones of a region⁵⁹. According to [Panțu], who gives the most comprehensive list, but remains quite unspecific about the topographical spread of the words, it can be called:

⁵⁷ The section on Romanian was written by Ioana Galleron.

⁵⁸ The older *Dictionar Englez-Roman* by the Romanian Academia (1974) indicates four equivalents: «*paraluța, banțu, banuței, bumbisor*».

⁵⁹ Great historical Romanian regions are four: Moldavia, Wallachia, Transylvania and Dobruja; inside these regions, other divisions are to be found, designated in turn as “regions”, and to which [Panțu] is referring (for a list, see https://en.wikipedia.org/wiki/Historical_regions_of_Romania). At least until the modern era, their historical evolution has not been the same, and this has had a significant impact especially with regards to the language spoken in these areas. To give a very rough description of the situation, it is to be borne in mind that Moldavia is closer to the Slavic speaking area, Wallachia and Dobruja had more contacts and exchanges with the Turkish and Greek populations, while Transylvania was part of the Austro-Hungarian empire, with Hungarian and German as official languages for a long period of time. On the top, or at the bottom of this, two unifying factors: the Latin origin of the language, and an Orthodox christianism following Slavonic rites and using Slavonic translations of the Bible.

Item	Related forms	Region where in use
<i>bănuț</i>	<i>bănuței</i> <i>bănuțele</i>	
<i>bumbușor</i>		<i>Bucovina</i>
<i>butculiță</i>		<i>Transylvania</i>
<i>floare frumoasă</i>	<i>floricele frumoase</i>	<i>Transylvania</i>
<i>frușiță</i>		<i>Transylvania</i>
<i>năsturași</i>	<i>năsturel</i>	<i>Muntenia (greater wallachia)</i>
<i>părăluțe</i>		<i>Muntenia</i>
<i>scânteiuță</i>	<i>scânteuță</i>	<i>Bucovina</i>

Table 7 – *bellis perennis* in Romanian

To these forms, [DLRLC (1955-1957)] adds “păscuță”, without specification about the region where in use, but also without mentioning many of the equivalents given by [Panțu].

It is to be noted that, with very little exceptions, this long series of items creates no confusion with *leucanthemum vulgare* (or *chrysanthemum leucanthemum*), designated by a completely different series of words: *aurată*, *margaretă* (Muntenia), *ochiul bouului* (Transylvania), *roman* (Transylvania), *romoniță mare* (Bucovina), *tătăișe* (Bucovina). The two plants are mistaken only in [DER 1958-1966], and in some dictionaries of synonyms. The first one, much more preoccupied by the etymology of the word than by the description of the plant, says that *frușiță* (pl. *frușițe*) is an equivalent of *margaretă* (*Bellis perennis*):

Origine necunoscută. După Cihac, II, 500, Pușcariu, *Diminutivsuffixe*, 71 și DAR, de la numele *Frosa*, *Frusina* „Eufrosine”; însă este dificil de explicat această der. După Tiktin, și Pascu, *Beiträge*, 40 de la *frumușiță*, soluție nu chiar imposibilă.⁶⁰

(Dictionaries of synonyms add in other botanical mistakes. As equivalent for *bănuț*, they give: (*BOT.*; *Bellis perennis*) *părăluță*, (reg.) *bănuței* (pl.), *bănuțele* (pl.), *bumbușor*, *butculiță*, *frușiță*, *mărgărită*, *păscuță*, *rotoțele* (pl.), *scânteioară*, *scânteiuță*, *floare-frumoasă*, *floricele-frumoase* (pl.). ([Sinonime 1982]; [Sinonime 2002])

⁶⁰ ‘Unknown origin. Cihac, II, 500, Pușcariu, *Diminutivsuffixe*, 71 and DAR, [consider it derives] from the first name *Frosa*, *Frusina*, i.e. Euphrosyne; however, it is difficult to explain such a derivation. Tiktin and Pascu, *Beiträge*, 20, [derive it] from *frumușiță*, which is not impossible after all.’

The three underlined words refer, according to [Panțu], to different flowers; one would have recognised in *mărgărită* a variation on *margaretă* (Fr. *marguerite*, Lat. *leucanthemum vulgare*), while *rotoțele* is *achillea ptarmica* (Ro. *iarbă de strănutat*, Fr. *herbe à éternuer*) and *scânțioară* would be *anagallis arvensis* (Fr. *mouron rouge* or *mouron des champs*). It is not clear why the two first false synonyms have been included in this list; to a certain extent, the third one has its explanation in the phonetic similarity with *scânțieiuță*, formed on the same root⁶¹, used indeed in certain regions for *bellis perennis*.

In fact, complications occur mainly because of phenomena of paronymy and homonymy in the list of words quoted above. This is especially the case for the second and the last item, *bumbușor*, respectively *scânțieiuță* mentioned above. Phonetically, *bumbușor* is easy to confound with *bumbișor*, or even *bunghișor*, all the more so that *bumbușor* and *bumbișor* are both diminutives of *bumb* (from the Hungarian *gomb*), designating a small button, and *bunghișor* can be interpreted as a Moldavian variation on the same root. Or, according to [Panțu], followed by other thematic sources, in Bucovina *bumbișor* designates *anthemis tinctoria* (also called in Romanian *floare de perină*), while in Moldova it is used for *pyrethrum balsamita* (vulg. *spilcuțe*). According to the same source, *bunghișor*, in use in Bucovina, is *Erigeron acris*. To confuse issues even more, *bunghișor* has as equivalents *ochiul boului* and *steluțe*: if one can leave easily aside the second one (literally, 'little stars'), the first one poses interesting problems, as it is the same as one of the Transylvanian words for *leucanthemum vulgare*, and it means literally *ox-eye*!

On the other hand, *scânțieiuță* as equivalent of *bellis perennis* seems to be of a limited use. The item is more often quoted as equivalent for *gagea pratensis*, and both for *anagallis arvensis* and *gagea arvensis*, not to mention *Erythraea centaureum* (for *scânțieiuță de friguri*) and *ficaria ranunculoides* (for *scânțieiuță*

⁶¹ *Scânție*: Fr. *étincelle*, Eng. *spark*. *Scânțieiuță* are both diminutives, and mean literally *little spark*, a description appropriate to the flower it designates.

galbenă). Less complex, but adding in to the general confusion, is the situation of *năsturaș*, meaning either *bellis perennis*, or *nastratum officinale*.

To sum up, through homophones and paronyms, but also through a list of (debatable) synonyms, very different families of plants meet in a quite inextricable “bouquet” in Romanian. Specialised dictionaries use the Latin equivalent and botanical terminology to disambiguate who is who⁶², but this very precision is of little use to the lay public, which gets rapidly lost with the technical terms⁶³. Usual dictionaries, on the other hand, are somewhat light in their descriptions:

bănuței m. pl. floare de podoabă cu frunze mici și rotunde, numită și **floare frumoasă** (*Bellis perennis*) [Săineanu 1929]⁶⁴

bănuț, *bănuți*, s. m. 3. (*Mai ales la pl.*) *Plantă mică, erbacee, din familia compozeelor, cu flori mici și rotunde, frumos colorate* (*Bellis perennis*) [sic]. [DLRLC 1955-1957]⁶⁵

bănuț, *bănuți*, s. m. 3. *Plantă erbacee cu flori mici și rotunde, frumos colorate, dispuse în capitule; păraluță, bănuțel* (*Bellis perennis*). [DEX 1998]⁶⁶

bănuț ~im. (*diminutiv de la ban*) 2) *Plantă erbacee decorativă asemănătoare cu margaretele, cultivată pentru florile sale rotunde, plate, de culoare albă sau roz; păraluță*. [NODEX 2002]⁶⁷

⁶² Here is the definition for *bellis perennis* in [DFL 1989]: “Specie care înflorește în mart.-iun. Plantă de cca 10 cm înălțime, perenă, cultivată ca bienală. Frunze oval-spatulate așezate în formă de rozetă, din mijlocul căreia pornește un peduncul ce poartă în vîrf cîte un singur capitul format din flori, cele marginale, femele, albe sau roșee, cele centrale, galbene (Pl. 12, fig. 68).”

‘Species blooming in March-June. The plant is some 10cm tall, perennial, cultivated as biannual. Leafs are oval-spatulated, disposed in circle; in the middle starts a peduncle wearing on top a single capitulum of flowers, females, and white or rose, on the margin, yellow in the centre.’ (our translation)

⁶³ This is also the case of some lexicographers, judging by the use of *capitulum* in some of the definitions below.

⁶⁴ ‘Ornamental flower with small and round leafs, also called floare frumoasă.’ (our translation).

⁶⁵ ‘Small plant, herbaceous, pertaining to the family of compositae, with small and round flowers, nicely coloured.’ (our translation).

⁶⁶ ‘Herbaceous plant with small and round flowers, nicely coloured, disposed in capitulum’ (our translation).

⁶⁷ ‘Herbaceous decorative plant, similar to *marguerites*, cultivated for its round, flat, white or rose flowers.’

părălúță ~ef. (diminutiv de la **para**) Plantă erbacee decorativă, asemănătoare cu margaretele, cultivată pentru florile mici, rotunde, de culoare albă sau roz; bănuț. [NODEX, 2002] see *bănuț* above

păscúță, *păscuțe*, s. f. 2. Plantă de primăvară care face flori albe (*Bellis perennis*); gușagăinii; (la pl.) bănuți. [DLRLC 1955-1957]⁶⁸

This situation may be related to the fact that the words referring to *bellis perennis* are themselves evocative, and once the indication given that items are to be understood as plants with (generally white) flowers, it is the implicit comparison *in absentia* which is probably supposed to convey the right image in the mind of the speaker.

The origin of the words designating *bellis perennis* is unclear. [DER 1958-1966] presents *bănuț* as a diminutive of *ban*, issued from a Germanic word, or maybe from a medium Latin *bannum*; *părălúță* is a diminutive of the Turkish *para* ‘coin of little value’. Both mean a small piece of money: small, round, reminding the glowing of coins with their light colour detached on a darker background. This implies a metaphorical use for designating the flowers, and therefore a belated entry in the language, since *ban* has not probably acquired the sense of ‘piece of money’ until the 12th century; also, massive contact with the Turks, creating the conditions for vocabulary exchange, has taken place rather after the 13th century. But how the Romanians were designating *bellis perennis* until the 12th or the 13th century? Did they wait for the Middle Ages to invent a name for such a common flower? An alternative explanation may be to imagine a phonetic and semantic contamination, similar to the one having taken place in Portuguese, as hypothesised in the previous section, with *bellis* becoming *bonum*⁶⁹ and then evolving further when *ban* acquired the sense of ‘piece of money’. Further, *bumbușor* and *năsturaș* modified somewhat the image, comparing the flower with small buttons, very close in their aspect to the little coins evoked by the word *ban*. As mentioned above, *scânteuță* means spark; if the idea of a round form vanishes somehow

⁶⁸ ‘Springtime plant blooming white flowers’

⁶⁹ Known as the origin of the word *bun* (good) in Modern Romanian.

with this item, the glittering of the bloom is pushed forward, as well as the idea of a small plant/ flower. The less explicit are *butculiță* and *frușiță*, the first one evoking remotely a little bottle, the second being less immediate comprehensible. Finally, *floare frumoasă* means literally ‘beautiful flower’– a quite non-discriminant characteristic, since generally flowers are beautiful, and the category of ‘ugly flower’ is not one of the most common in Romanian language. Given the three characteristics (small, round, glittering) suggested by the most common words used to designate *bellis perennis*, as well as this association with the beauty, one can say that the plant is the prototype of field flowers, the one with regard to which all the others will appear as variations on the same theme. This may be the reason of the botanical confusions one can find in dictionaries of synonyms, since, in a way, all field, wild flowers, with small round capitula, be they *bellis perennis*, or *leucanthemum vulgare* can be mistaken as ‘coins’ or ‘buttons’ spread on a lawn, or as ‘sparks’ scattered all over a meadow.

Examples given in dictionaries and found on webpages indicate that *bellis perennis* is associated to (or meant into) three quite specific contexts. The first one is that of a description of a springtime landscape:

*Am găsit... cele dintâi păscuți albe. SADOVEANU, O. VIII 13 [DLRLC 1955-1957]*⁷⁰

De îndată ce pajiștea devine ca buratecul este împestrită cu drăgălașele părăluțe (*Bellis perennis*), bănuți de sidf ce strălucesc pe smaragdul ierbii. Spre deosebire de spița sălbatică a neamului, părăluțele de grădină au floarea bătută. Sunt colorate felurit de la alb la roșu de trandafir. Prin petalele lor oacheșe aruncă atâta veselie pe pajiștea verde, încât fără sa vrei îți aduci aminte de tabloul lui Boecklin cu copilașii ce se hirjonesc într’o pajiște primăvărată, presărată cu părăluțe. [Simionescu 1939]⁷¹

If these examples use unambiguous Romanian words (i.e. *păscuți*, *bănuți*, *părăluțe*– all of them related only to *bellis perennis*, according to [Panțu]), it is easy to substitute “bumbușori”, “bumbișori” or “năsturași” in this context, all the

⁷⁰ ‘I have found the first white daisies’

⁷¹ ‘As soon as the lawns become as green as a frog they get sprinkled with the lovely daisies (*Bellis perennis*), small coins of nacre glowing on the emerald grass. To the dif-

more so as the author of the second quotation clearly evokes ‘buttons’ when he speaks about ‘coins of nacre’ (reminding the Greek *margarites*) – a somewhat curious material to coin pieces, but very much used to manufacture buttons. When considering the verbs (‘sprinkled’, ‘aspersed’), one can also think about sparks, *scânteuțe*. Obviously, the three denominations are deeply associated in the spirit of the Romanian speaker, even in the mind of a botanist as Simionescu (1939), who was certainly not mistaking *bellis perennis* with *leucanthemum vulgare*, nor with the many other plants to which *bumbișor* or *năsturaș* can refer to. The fact is that the context does not allow us to think that *bumbișori* or *năsturași* could designate anything else but *bellis perennis* – a series of small, precocious, springtime, round flowers, growing in short cut grass.

The second context is that of gardening – books and websites offering advice to young or confirmed gardeners. *Bănuți* and *părăluțe* seem to be exclusively used to designate *bellis perennis*, and the Latin equivalent is regularly provided. To a Romanian gardener, *bellis perennis* is a small flower, with one or several florets of different colours; the keywords, in such situations, are ‘perennial’ and ‘biannual’.

The third context is that of folk pharmacopoeia; it is the one where contamination of denominations can be most annoying. *Bellis perennis*, again designated above all as *bănuț*, has proprieties in fighting migraines, a quite specialised use to which *leucanthemum vulgare* or *anthemis tinctoria* are improper.

To sum up, *bellis perennis*:

- is a plant carrying a small flower, in both senses of size of the floret and height. Almost all items designating it in Romanian (exception made by *floare frumoasă*) have in common to be diminutives⁷².

ference to the uncultured species, garden daisies have several florets. They have various colours, from white to red rose. Their good looking petals spread so much joy on the green lawn, that one remembers involuntarily Boecklin’s painting with small children playing on a spring lawn, aspersed with daisies.’

⁷² It is true that, in Romanian, diminutives are more often hypocoristic, but in this precise case they also carry information about size. Significantly, only one diminutive is quoted by Pantu to be in use for *leucanthemum vulgare*, while the flower is no less lovely:

- is not a solitary plant, it grows in groups (see the almost systematic use of plural forms);
- is a plant growing on lawns;
- is a plant growing in springtime, associated, as such, with Easter time and rebirth of nature, and more generally with the idea of incipience, as one can see in the use of the word ‘children’ in the quotation above, but also in the use of ‘first’ by [DLRLC 1955-1957]: not only the first daisies, as one would say the first tomatoes, but also the first flowers to bloom after winter;
- is an ornamental plant (and more largely associated with joyous ideas);
- it cures headaches.

The following diagram is a schematic representation of relations between Latin denominations and related Romanian forms:

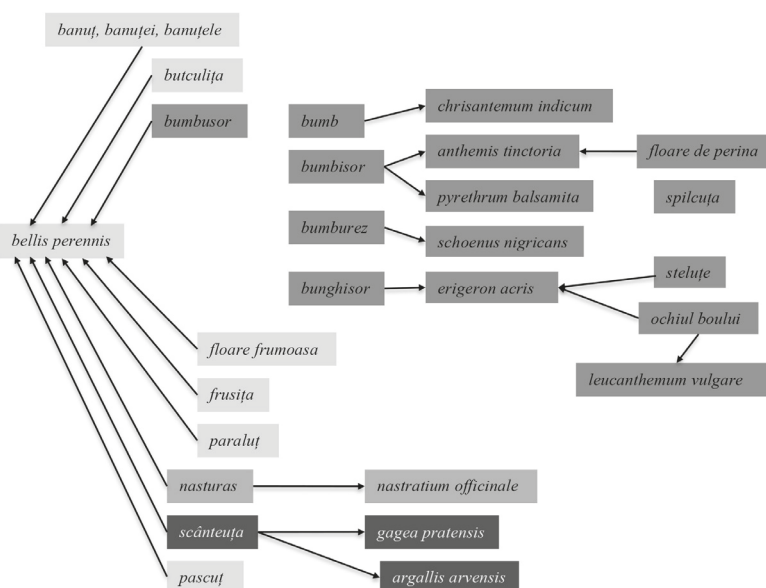


Figure 7 – Latin denominations and related Romanian forms

however, no one felt the need to call it *ochișorul boului* (approx. “the small ox eye”), to forge but one example.

SUMMARY AND OUTLOOK

In the previous sections, we have found some intricate informations on the equivalents of 'daisy' in five different Romance languages. It became obvious that all these languages possess more than one word for 'daisy' and that the relationship between each of these words and one specific botanic specimen is far from unequivocal. The contemporary predominance of cognates from the Latin *margarita* is located in French, that has led the metaphor from the original meaning 'pearl' to the name of a wild flower. The spreading of this metaphor has reached all the languages that we have considered, and we know that the same happened elsewhere, but the name was not always mapped into the same species: some of them link it to *bellis perennis*, other assign it to *leucanthemum vulgare*, and other still keep the ambiguity that all the other previously existing names seem to also enclose.

The relationship between vernacular name and botanical Latin names, established from the 17th century, was also considered. The species that we aimed to consider was *bellis perennis*, but we concluded that most speakers have no knowledge about the botanical classification and most dictionaries also disregard it. Furthermore, we have also tried to take into account the names that preceded the spreading of the loans from the French *marguerite*. Apparently, the older vernacular names fall under a small number of categories that are represented in many of these languages:

1a. Direct heirs of Lt. *bellis*

Italian – *bèllide*

Galician – *belorita, bilorita, velorita, vilorita*

1b. Heirs of Lt. *bon-*

Galician and Portuguese – *bonina*

Romanian – *bănúț*

1c. Semantic adaptation of Lt. *bellis*

Romanian *floare frumoasă*

2a. metaphor: pearl

French – *marguerite* (13th c.)

Italian – *margherita* (1591)
Portuguese – *margarida* (19th c.)

2b. metaphor: small button / coin

Romanian – *bumbișor, părăluțe*

2c. metaphor: sparkl

Romanian – *scânteuța*

3a. Names that refer where the flowers grow

Italian – *pratolina, prataiola, prattelina*

Portuguese – *pampilho* (?)

Romanian – *păscuță*

French – *pâquerette*

3b. Names that relate to the place where the flowers grow

Galician – *ponmerendas, quitamerendas*

4. Names related to an activity involving the flowers

Portuguese – *malmequer*

Portuguese – *bem-me-quer*

Galician – *ben me quer*

Modern Greek⁷³

This section is a contribution to the study of the Modern Greek (MG) vocabulary and lexicography especially in relation to the words carrying the meaning ‘*daisy*’ and how these words appear in the entries of MG dictionaries. Our data comes from: 1) modern lexicographical resources and particularly the online editions of [DSMG], [GOD] and [Georgacas], 2) the hard copy editions of [Du Cange], [Somavera], [Skarlatos], [Dimitrakos], [Babiniotis], [DCG] and [HD], and the enlarged edition of [Heldreich]⁷⁴.

STANDARD MODERN GREEK (SMG) NAMES FOR ‘DAISY’

⁷³ The section on Modern Greek was written by Simeon Tsolakidis.

⁷⁴ Originally published in 1908, this dictionary was edited and republished by S. Miliarakis in 1926.

The common designation for ‘daisy’ in MG is *μαργαρίτα* [marya'rita]. Like all the cognates found thus far, it comes from Hellenistic Greek *μαργαρίτης* [marga'rite:s] ‘pearl’, but not directly. In fact, MG [marya'rita] goes back to a Romance origin, vehiculated by Old Italian *margarita* (cf. [DSMG]’s entry ΜΑΡΓΑΡΙΤΑ), itself obtained from Old French *marguerite*.

According to the very first MG lexicographical attestation in [Somavera], [marya'rita] is related to ‘calendula’, and this could be an indication that at least in the 18th century (or even in the late 17th century) [marya'rita] was used as a designation for *asteraceae* with white or yellow petals.

Μαργαρίτα, ή. (λουλούδι.) Calendula, fiorrancio, fiord'ognimese, centroclla, spota de sole.

This seems to have changed in the first half of the 20th century, since in [Dimitrakos] (vol. 9), [marya'rita] is described as *το φυτόν άνθεις η λευκανθίς*, ‘leucanthemum chrysanthemum’.

In the 21st century, in the *μαργαρίτα* entry of [DCG], we are provided with actually the same information, since *leucanthemum chrysanthemum* is provided as the scientific name for [marya'rita]. On the other hand, in the definition part [marya'rita] is more thoroughly described as a *πωώδες αυτοφυές φυτό με άνθη κίτρινα στο κέντρο και λευκά πέταλα*⁷⁵, a description that could fit for a lot of kinds of daisies (consequently, for *bellis perennis*, too).

On the other hand, [Somavera]’s use of [marya'rita] for *asteraceae* with both white or yellow petals reappears in the late 20th century [DSMG], where [marya'rita] is described as a *λουλούδι με άσπρα ή κίτρινα πέταλα τοποθετημένα κυκλικά γύρω από τον ύπερο και τους στήμονες, που είναι κίτρινοι*⁷⁶, something which fits to a lot of *asteraceae*. The same holds in the case of [Babiniotis], where [marya'rita] is

⁷⁵ ‘herbaceous plant with a flower head consisting of white ray petals that surround a yellow disc’ (our translation).

⁷⁶ ‘flower with white or yellow petals surrounding the pistil and the stamens, which are of yellow colour’ (our translation).

described as a *πώδες φυτό του αγρού με χαρακτηριστικό άνθος που φέρει κίτρινο δίσκο και λευκά ή κίτρινα πέταλα*⁷⁷.

Quite interesting is the *μαργαρίτα* entry in [GOD], the most recent of all the dictionaries under examination. [marya'rita] is referred to as *Κοινή ονομασία για φυτά που ανήκουν σε διαφορετικά γένη και είδη· τα άνθη τους μοιάζουν πολύ, αφού σχηματίζουν ταξιανθία με κεφάλια που έχουν δύο είδη ανθιδίων· τα ανθίδια που βρίσκονται στο κέντρο του κεφαλιού είναι σωληνοειδή, με κίτρινο συνήθως χρώμα, ενώ τα περιφερειακά είναι γλωσσοειδή, με χρώμα συνήθως λευκό ή κίτρινο*⁷⁸. Here again we have a description matching a lot of *asteraceae* (and actually in [GOD] we are informed that [marya'rita] belongs to the family of *compositae*, which is equivalent to *asteraceae*. In any case, [GOD] is the only dictionary where the users are explicitly informed that the term for 'daisy' in MG is a 'common term for plants belonging to different genera and species', and we believe that this is a real progress concerning the MG dictionary definitions of [marya'rita], at least on the level of getting users aware that the term [marya'rita] is connected with a wide variety of flowering plants. In the next chapter we will discuss more peripheral MG flower names referring to daisies.

OTHER NON-SMG NAMES FOR 'DAISY'

Let's begin with the observation that in [Heldreich] we are not provided with MG popular equivalents of *bellis perennis*. If we take into account that Theodor von Heldreich was a pretty famous botanist of his times (according to *The International Plant Names Index*, he discovered seven new genera and 700 new species of plants, 70 of which bear his name⁷⁹, we can quite safely assume

⁷⁷ 'herbaceous plant of the field with a characteristic flower bearing a disc and white or yellow petals (our translation).

⁷⁸ 'the common term for plants belonging to different genera and species; their flowers look very much alike, since they have an inflorescence with heads having two kinds of anthers; the ones being in the center of the head are tubular, usually yellow in color, while the peripheral ones are tongue-shaped, usually white or yellow' (our translation).

⁷⁹ www.ipni.org/ipni/advPlantNameSearch.do?find_includePublicationAuthors=on&-find_includePublicationAuthors=off&find_includeBasionymAuthors=on&find_includeBa

that Heldreich believed that this kind of *bellis* did not exist in Greece. On the other hand, in the 'Compositae section' of [Heldreich], *bellis annua* and *bellis sylvestris* are mentioned (along with their popular Greek terms), meaning plants that do not differ so much in appearance from *bellis perennis*.

We cite below the relevant entries from [Heldreich]:

Bellis annua L. ἄστρο (Ἡπειρος X. Marg.), στεκούλι (Κεφαλ. Δαλλαπ. X.), ἄνοιξι (Κέρκ.), ἀσπρολούλουδα (Sibth. Fr. Marg.)⁸⁰.

B. silvestris Cyr. λεμονόχορτο (Ζάκ. Sibth.).

On the other hand, [Heldreich] claims that [marya'rita] is a popular Greek name for *anthemis arvensis* and *anthemis chia* in the following entries:

Anthemis arvensis L. μαργαρίτα (Φωκίς Maire), ασπροπούλια (Σκῆρος Τούντ.).
A. chia L. παπούνη (Κύπρ. Sibth.), ζωγιέρα ἀπὸ τῆς πύργου (Κέρκ.), κουτρούλια (Ἀμοργ. X.), ἀρμέγκα (Ἀττική Fr.), ἄγρια μαργαρίτα (Ἀττική X.).

Besides, in the *calendulae species* entry we are informed that the plural of [marya'rita] μαργαρίτες [marya'rites] is used on the Aegean island of Tinos as a popular term for *calendulae*, meaning *marigolds*:

C. species νεκρολούλουδα (Ἀθῆναι X.), μοσκαρδίνια (Κεφαλ.), μαργαρίτες (Τήνος Πεν.).

In this point it should be taken into account that [Heldreich] was composed in a period when a Common Modern Greek (CMG) was still under development, being characterized, amongst others, by great dialectal or regional diversity (cf. Mackridge 2014). This is reflected in [Heldreich], since after every popular term given the area where it is used is given (inside brackets). But in every case, [Heldreich]'s data show us that [marya'rita] in the early 20th century is neither a CMG cover term for daisies nor a term for *bellis perennis*. The same period

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⁸⁰ [Heldreich] is composed like a dictionary of synonyms, providing for every of its headwords (consisting of Neolatin scientific names) MG equivalents from various regions of Greece. In this section the MG synonyms in the entries to which we refer to, are underlined.

in a glossary of plant names from the Ionian island of Kefallinia, published in 1876 (and included as an appendix in [Heldreich]) [marya'rita] is defined as *ο γνωστός πολυανθής σφαιροειδής θάμνος με τα λευκά άνθη. Και το άνθος του χαμομηλίου*⁸¹. According to this entry, we see that, at least in certain regions of Greece, [marya'rita] was actually a cover term for various kinds of *bellis* with white flowers, as well as for the *chamomile*.

Let us now examine other popular Greek terms that are or were used instead of [marya'rita] in other regions of Greece. In case of *anthemis arvensis* in [Heldreich] we are informed that except from [marya'rita] in Phocis (Central Greece), on the island of Skyros, the term *ασπροπούλια* [aspro'puɫa] 'lit. little white ones' (plural of [aspro'puli] < ['aspros] 'white' + dim. [-pulo]) is used. It is quite interesting that in [HD] in *άσπρόπουλλο* entry (vol. 3) [a'spropulo] is presented as a term denoting two kinds of *compositae*: *anthemis chia* on the island of Andros and *chamomile* (*matricaria chamomilla*) on the island of Skyros. If we combine the informations provided in [Heldreich] and [HD] concerning [a'spropulo] on Skyros we see that in this island the term denotes both a flower similar to *bellis perennis* and *chamomile*, as we saw in case of [marya'rita] on Kefallinia, too.

Besides, in [HD] entry we are informed that an equivalent of [a'spropulo] is *ασπρολούλουδο* [aspro'luluɫo] (lit. 'white flower'), formed through the combination of *άσπρος* ['aspros] 'white' and *λούλουδο* ['luluɫo] 'flower'.

In the case of [Skarlatos] the *ΑΣΠΡΟΛΟΥΛΟΥΔΟΝ* entry is the following:
ΑΣΠΡΟΛΟΥΛΟΥΔΟΝ (τὸ ἄγριον χαμόμηλον ἢ τὸ κοπρολούλουδον. Εἶναι διαφόρων εἰδῶν). ἄνθ. » Ἀστερίς, ἄστερία (πόα), ἀνθεμῖς, ἄνθεμον, ἀνθέμιον, λευκάνθεμον, μελάνθεμον, ἡράνθεμον (κυρ. τὸ πορφυρανθές), χρυσοκόμη, κηράνθεμον, καλλία, ἀργεμώνη, marguerite, θ. camomille (sauvage), paquerette, θ.

[Skarlatos] is actually a dictionary of synonyms, providing for every MG headword equivalents from AG and HelG as well as from French. In the above entry various plant names from different periods of the history of Greek (without any indication denoting that a plant name is Ancient or a Modern Greek one)

⁸¹ 'the well known multiflore spherical bush with white flowers. And the flower of the chamomile' (our translation).

are provided as equivalents not only of MG [aspro'luluðo] but also of French *marguerite, camomille and paquerette*.

The *άσπρολούλουδο* entry in [HD] is the following (vol. 3):

άσπρολούλουδο το, σύννηθ. *άσπρολούλουδουβόρ. ιδιώμ., άσπροάλουδο* Πελοπν. (Μάν.) *άσπρολέλουδο* Στερελλ. (Λράχ.) *άσπρολούλουδο* Χίος.

Έκ τοῦ ἐπιθ. *άσπρος* καὶ τοῦ οὖσ. *λουλούδι*.

1) Λευκὸν ἄνθος πολλαχ.: [examples of use in MG literature] 2) Τὸ ἀγριολούλουδον λευκανθὲς τὸ πολυετὲς (*bellis perennis*) καὶ λευκανθὲς τὸ ἐτήσιον (*bellis annua*) τοῦ γένους τοῦ λευκανθοῦς (*bellis*) τῆς τάξεως τῶν συνθέτων (*compositae*) πολλαχ. 3) Τὸ φυτὸν ἀνθεμὶς ἢ Χία (*anthemis Chia*) τοῦ γένους τῆς ἀνθεμίδος (*anthemis*) τῆς τάξεως τῶν συνθέτων (*compositae*) πολλαχ.: [example of use in MG literature] Συνών. *άσπρόπουλλο* 2.

The above entry of [HD] is particularly interesting because in subsense 2 we are informed that [aspro'luluðo] denotes *bellis perennis* 'in a lot of places in Greece' (*πολλαχ(ού)*) in the first half of the 20th century. In the same subsense, *bellis annua* is mentioned, and if we take into account that in subsense 3 *anthemis chia* is used, then we see again that [aspro'luluðo], a word literally meaning 'white flower' (cf. *Λευκὸν ἄνθος* in subsense 1) is a plant term denoting various kinds of *daisies*, as well as flowers similar to *daisies*. Finally, there is no mention to some kind of *chamomile* in the above presented entry and actually the [HD] entry is likely to be the oldest or one of the oldest MG dictionary entries where an equivalent for *bellis perennis* is explicitly provided (the volume of [HD] that includes the *άσπρολούλουδο* entry was published in 1941). Finally, at the end of the entry two lines from a Modern Greek poem (published in 1912) are cited, where [aspro'luluðo] is presented having the 'he/she loves me – he/she loves me not' function of '*daisy*'.

It is quite interesting that in [Georgacas], a dictionary composed during the second half of the 20th century, we get the same citation as an example of use and (in subsense 2 concerning the meaning 'daisy') there is a direct connection between [aspro'luluðo] and [marya'rita], since the latter is mentioned as an equivalent of the first in *ασπρολούλουδο* entry:

ασπρολούλουδο [aspro'luluðo] το, bot ①white flower: αγνό, αμάραντο ~ | κράταγε στο χέρι της ένα ~ του κάμπου (Drosinis) | έτρεχε κι έκοβε κάτι ασπρολούλουδα σ'άψηλά κλώνια, που ανθίζανε δέσμες δέσμες (Christomanos) ②specif daisy (syn ασπρολούλουδο, μαργαρίτα): ποेम μάζεψα εφτά ασπρολούλουδα, πολλή ώρα μέσ'το σάδι, | τα τέσσερα μου'παν το ναι, τα τρία μου'παν όχι (Krystallis) [cpd w. λουλούδι]

In subsense 2 in the above entry, as syn(onyms) of [aspro'luluðo], *μαργαρίτα* [marya'rita] and *ασπρολούλουδο* [astro'luluðo] are mentioned. [astro'luluðo] is a compound from *άστρο* ['astro] 'star' and ['luluðo] 'flower'. The *άσπρολούλουδο* entry in [Georgacas] is the following:

ασπρολούλουδο [astrolúluðo] το, bot daisy (syn ασπρολούλουδο 2, μαργαρίτα) [cpd w. λουλούδι]

The respective entry of [HD] is the following (vol. 3):

άσπρολούλουδο τό, ΣΣκίπη, Κάλβ. μέτρ. 19 – Λεξ. Περίδ. Μπριγκ. Βλαστ. Πρω.

Έκ τῶν οὖσ. ἄστρο καὶ λουλούδι.

Τὸ ἄνθος μαργαρίτα. Πβ. *άσπρολούλουδο*, ἄστρο 3.

In the above entry [aspro'luluðo] is defined as *Το άνθος μαργαρίτα* 'The flower daisy'. Since in this entry we have references to various dictionaries written at the end of the 19th century and during the first quarter of the 20th century we are provided with a somehow strong indication that, at least according to lexicographical data, [astro'luluðo] possibly was a CMG term for 'daisy'. Things seem to have changed during the 3rd or 4th decade of the 20th century, since [HD] is the last MG lexicographical reference work where an *ασπρολούλουδο* entry exists. In [Dimitrakos] the CMG term for daisies seems to be only [marya'rita].

In the [HD] entry for [astro'luluðo] two equivalentents are mentioned: [aspro'luluðo] (for which we already commented) and ['astro] 'star'. ['astro] is mentioned as a kind of flower (*Εἶδος ἄνθους*) in a subsense of the *άστρο* entry in [HD] (vol. 3). In the respective subsense of the *ἄστρον* entry in Dimitrakos (vol. 3) we read:

8) δημ. ἄστρο εἶδος τοῦ φυτοῦ λευκανθές (bellis annua), ἄ. ἀσπρολούλουδο, ἄνοιξη, στεκούλι, μπέλλα.

In the above subsense we see that ['astro] is related to *bellis annua* and its equivalentents are *άνοιξη* ['aniksi] 'lit. spring', *στεκούλι* ['stekuli] (< *στέκω* ['steko] 'to

stand'; maybe the literal meaning is 'the little one who stands here and there') and *μπέλλα* ['bela] (presumably a continuation of Latin *bellis*, maybe of Romance origin). In case of ['aniksi] in the relevant entry of [HD] and especially in subsense 5 (vol. 2), we are informed that ['aniksi] could refer to ἄνθος *bellis annua*, εἶδος χαμαϊμήλου 'bellis annua, a kind of chamomile' on the island of Corfu, and its equivalents are [aspro'luluðo] and *μαρτολούλουδο* [marto'luluðo] 'lit. the flower of March' (< *Μάρτης* ['martis] "March" + ['luluðo] 'flower')⁸².

In the case of [Dimitrakos], through the subsense 3 of *ἄνοιξη* entry, we are informed that ['aniksi] could refer to τὸ φυτόν λευκανθές 'the plant *leucanthemum*' and the equivalents of it are ['astro] and ['stekuli]. On the other hand, ['aniksi] is not mentioned as an equivalent of some kind of daisy or plant in the respective entries of MG major lexicographical works compiled since the second half of 20th century. The same holds true in the case of ['astro].

SUMMARY AND OUTLOOK

The MG data we presented in this section could be divided into two basic parts with the criterion of the +/- foreign origin (FO). In the category of +FO belong two Romance loanwords in MG, meaning that [marya'rita] and probably ['bela]. In the category of -FO belong words for which we could refer to the following motivational mechanisms: 1) the (white) color of the petals: [aspro'luluðo], [a'spropulo], with [aspro-] as their first component, 2) the properties of the flower: ['astro], [astro'luluðo], with [astro-] 'star' (because the flowers of daisy look like little (glowing) stars in the (darker) green background of a field), probably [ste'kuli] (< Medieval Greek *στέκω* ['steko] 'to stand'; maybe the literal meaning is 'the little one who stands here and there', 3) the time of blossoming: ['aniksi] 'spring', [marto'luluðo] with ['martis] 'March' as its first component.

According to the available lexicographical data (presented in this chapter) the MG term for 'daisy', [marya'rita], was not a (cover) term for this kind of

⁸² The only *μαρτολούλουδο* entry that we found in the dictionaries under examination is in [Dimitrakos], where the only meaning given for [marto'luluðo] is 'chamomile': *μαρτολούλουδο* (τό) δημ. τὸ χαμαϊμήλον βλ. λ.: Κορ. Ἰτ. 4, 311

flower in every Greek-speaking area before the 20th century. If we take into account that [marya'rita] is attested in regions of Central and Western Greece, varieties of which played an important role in the formation of Common Greek (Pandelidis 2007), then we could assume that [marya'rita] developed to a cover term for 'daisy' during the formation of a CMG where other, (supposedly) more regional terms for 'daisy' (like the ones we referred to in this chapter) became gradually obsolete.

One way or another, MG seems to belong since 20th century in that group of European languages where a word that (immediately or not) goes back to French *marguerite* developed to the basic or cover term denoting 'daisy'. Especially in case of Romance languages, this similarity could highlight or remind to us the fact that MG had strong relationships and interaction with languages such as Italian or especially French at least until the early or mid 20th century (Horrocks 2010).

Concerning the MG –FO terms for 'daisy' we could point out the motivation similarity between MG and some other languages mentioned in this chapter, for example MG ['astro] – Romanian *scânteuță* (both referring to the the flowers of daisy looking like little (glowing) stars in the (darker) green background of a field), MG [marto'luluðo] – German *Monatsblümlein* (both referring to time of blossoming).

Concerning the semantics of the basic MG term for *bellis perennis*, it is obvious that MG [marya'rita] nowadays does not refer only to that kind of 'daisy' but it is a cover term for various plants belonging to *asteraceae* or *compositae* family, or for various kinds of *bellis*. Thus, one important problem of the definition part in MAPTAPITA entries in major MG dictionaries is that the user is provided with definitions that either are not consistent with each other concerning the flower scientific names related with [marya'rita], or they are so broad that the user gets the idea that [marya'rita] is a term referring to every plant with flowers looking very similar, because they have an inflorescence with heads having two kinds of anthoids: the tubular ones, being in the centre of the head and usually yellow in color, and the the peripheral ones, being tongue-shaped and usually white or yellow in color. If we accept that MG lexicography takes seriously into account

data that show what a MG medium user believes for the semantic content of a word (for example modern text corpora), then at least in cases such as GOD and [DSMG] we believe that we have to do with definitions that both go back to and are aimed at an urbanized public for which any difference between, for example, *bellis perennis*, *bellis annua* and *bellis silvestris*, is probably too small to be important.

German and Estonian⁸³

German and Estonian are two languages that seem rather unrelated at first glance. While German belongs to the Germanic, and more precisely to the West-Germanic branch of the Indo-European language family, Estonian is classified as a Uralic (or Finno-Ugric) language of the Finnic branch. Thus, discussing these languages together is not motivated by a common genetic connection. However, there is a certain historical background of long-lasting German-Estonian contacts which clearly had an influence on the Estonian language.

Attempts to bring Christianity to the Baltic peoples had been undertaken from the 10th century on, but they considerably gained intensity from around 1200 on. During the 13th century, the Teutonic Order succeeded in gaining control of large parts of the Baltic territory, eventually establishing its own state there. Following the conquest, many German settlers – the (later) so-called Baltic Germans – came to the region. The German settlers took their language with them to their new home. Consequently, initially Middle Low German (MLG) – and High German (HG) since the middle of the 16th century – became the language of the upper social classes in the territory of Estonia until the beginning of the 20th century. As a result of its high status (being the official language for centuries, the language of (higher) education, and the mediator of cultural innovations), German had

⁸³ The section on German and Estonian was written by Wiebke Blanck, Yvonne Luther, Nathalie Mederake, Iris Metsmägi, and Vilja Oja. Iris Metsmägi's and Vilja Oja's work has been partially supported by the European Regional Development Fund.

a considerable influence on Estonian⁸⁴. In Estonian, more than one thousand loanwords of Low (LG) or High German origin can be found, for example Est. *müts* ← MLG *mutze* or Ge. *Mütze* ‘cap’, *arst* ← MLG *arste* ‘doctor’, *pilt* ← MLG *belde*, *bilde* or Ge. *Bild* ‘picture’. This influence is also very present in the vocabulary related to plant names, as the botanist Gustav Vilbaste (1993:669) states: “Borrowed terms, adaptations and translations from German are common in many plant names, along with some from Russian, Finnish, Swedish and Latvian.” Therefore, looking at Estonian designations for ‘daisy’ / *Bellis perennis* L., we have to deal with genuinely vernacular names such as (*harilik*) *kirikakar*, as well as with names suggesting German origin (e.g. *marienbluum* as a loan) or German influence (e.g. *mariialill* > *maarijalill* as a possible loan translation).

GERMAN EQUIVALENTS IN CONTEMPORARY DICTIONARIES

On the list of possible ‘daisy’ equivalents in German (see above), the diminutive *Gänseblümchen* appeared as the first entry and should be regarded as the most common contemporary German equivalent for the English word ‘daisy’. The Duden, a well-known language resource and the most common dictionary of contemporary German, defines *Gänseblümchen* as belonging to composite plants or *asteraceae*⁸⁵. It is described as a small plant consisting of a yellow flower head with white ray florets, which are often tipped pink. Also, *Gänseblümchen* are described here to be in bloom almost all year long. This general definition equals the definitions of ‘daisy’ in its main features as it is described in other languages:

Gänseblümchen, das

Substantiv, Neutr.

(zu den Korbblütlern gehörende) fast das ganze Jahr hindurch blühende, kleine Pflanze, deren Blüte aus einem gelben Körbchen und strahlenförmig darum angeordneten schmalen, weißen, an der Spitze oft rosa gefärbten Blütenblättern besteht

⁸⁴ Concerning the history of the linguistic situation in the Baltics and the Baltic Germans and their language, see e.g. von Boetticher (2016), Lele-Rozentāle (2016).

⁸⁵ www.duden.de/rechtschreibung/gaensebluemchen (February 2018).

Current German synonyms to the diminutive *Gänseblümchen* are *Maßliebchen*, *Tausendschön(chen)* and regionally *Angerblümchen*⁸⁶, whereas *Gänseblume* seems to have lost importance in actual usage, as it is not listed in contemporary dictionaries anymore. On a diachronic level, the differentiation of diminutive and non-diminutive nouns seems to be less relevant as both word forms often occur simultaneously (cf. 7.1.3. Common Swiss German variants are *Gänsegisserl* or *Gänsegismeli* (cf. Schweizerisches Idiotikon 2, 373).

Before having a closer look at each of the possible ‘*daisy*’ equivalents, attention should be drawn to the big picture of German designations: on a morphological level, the recurrent distinctive (and highly productive) feature for each equivalent is the suffix ‘-chen’, conveying the smallness of the object by means of the diminutive⁸⁷. The same applies to the suffix ‘-li’ in Swiss German. Also, most equivalents except *Maßliebchen* (which is borrowed from Middle Dutch *matelieve*) are compounds that consist of appellative components of different meanings. However, all components either refer to the definition given above or support a possible denomination strategy, which will be examined more detailed later on: *Gänse-blüm-chen* = ‘goose-flower + diminutive’, *Tausend-schön-chen* = ‘thousand-beauty (more accurately, as the second component is an adjective: thousand-beautiful) + diminutive’, and *Anger-blüm-chen* = ‘meadow-flower + diminutive’. Duden suggests these equivalents as synonyms to *Gänseblümchen*⁸⁸. Even though the given definitions are not as elaborate as in the case of *Gänseblümchen*, it is stated that there is no confusion of the proper meaning of each word:

Tausendschön, das / Tausendschönchen, das

Substantiv, Neutrum

(zu den Korbblütlern gehörende) kleine, im frühen Frühjahr blühende Pflanze, meist mit gefüllten weißen oder roten Blüten

⁸⁶ Duden only labels *Angerblümchen* as “landschaftl.” ‘regional’ without stating in which regions it is used. Adelung (1, 305) declares, the word is primarily to be heard in Upper German.

⁸⁷ Historically, the suffix *-lein* is of similar importance; see 7.1.3.

⁸⁸ www.duden.de/rechtschreibung/Angerbluemchen; www.duden.de/rechtschreibung/Tausendschoen; www.duden.de/rechtschreibung/Tausendschoenchen (February 2018).

Angerblümchen, das

Substantiv, Neutrum

(landschaftl.) Gänseblümchen

Marzell states that *Tausendschön* or its diminutive *Tausendschönchen* act more like a pet name (Marzell 1, 554).

OTHER GERMAN WORDS FOR 'DAISY'

There are a great number of other words for 'daisy', most of them are regional derivatives of more commonly used words, or they are only recorded for historical German, e.g. *Madlieblen*, *Matzliebche* as variants to the loan word *Maßliebchen* (cf. Nennich 1, 589-590; Marzell 1, 545-568)⁸⁹. We are also able to identify two more names in colloquial language that were quite common historically on a regional level and might still be: *Marienblümchen* and *Margerite*. Marzell postulates that *Marienblümchen* is of ecclesiastical origin (Marzell 1, 549). It might refer to a legend in which Mary, the mother of Jesus, hurt her finger while picking this particular flower (causing the often red-tipped florets). *Marienblümchen* and its derivations are likely to be more common in northern and western parts of Germany, but less in the south, although the *Swiss Idiotikon* records it (cf. *Schweizerisches Idiotikon* 5, 83)⁹⁰.

Margerite can be traced back to French *Marguerite* (Marzell 1, 551), which is the common Romance equivalent for *Bellis perennis* L. Nowadays, the German *Margerite* is only used for *Leucanthemum vulgare* Lam., which has a similar appearance as *Bellis perennis* L. but is considerably larger than the latter in all its parts.

Another name for *Bellis perennis* L. or (*Gänseblümchen*) is *Monatsblümlein* = 'month-flower + diminutive', which is not so popular from a contemporary point

⁸⁹ In the following we concentrate on the most common designations.

⁹⁰ DWB records both *Marienblume* and *Marienblümchen* in one entry (12, 1626) and defines it as "bellis perennis, gänseblümchen: merzveilchen und Marienblumen". The FWB records the lemma *Maria-Magdalena-Blume* (9, 1854), which is to be understood as 'Gänseblümchen' (9, 1854) according to the editor's note on the citation (i.e. the original source's editor).

of view. However, it is still an interesting denomination as it might refer to the early and very long flowering season of the plant (cf. Marzell 1, 560). Summing up, a rich field of denominations for *Bellis perennis* L. can be identified in German.

ETYMOLOGICAL AND HISTORICAL LEXICOGRAPHIC ANALYSIS

As in Estonian, the German designations for 'daisy' can be separated into words of native origin (*Gänseblümchen*, *Tausendschön(chen)*, *Angerblümchen*) and loanwords (*Maßliebchen*, *Margerite*). For all of these, diminutive (i.e. designations with suffixes *-chen* or *-lein*) as well as non-diminutive variants are attested side by side on a diachronic level. However, as general historical dictionaries as well as Marzell's dictionary of plant names do not really differentiate between them, it is not possible to evaluate the distribution of diminutives vs. non-diminutives in historical German⁹¹. Semantic aspects of word formation and etymology are closely connected to hypotheses about the denomination process that took place in each of these designations. In some cases (e.g. *Gänseblümchen*), several motivational backgrounds seem equally applicable, probably interfering with each other diachronically or even synchronically. The underlying selection of aspects focussed in the name-giving process is supposedly determined by several parameters (cf. Sauerhoff 2001: 220-233). These parameters must be attributed to the language users, first of all to their (visual) perception of the object to be named. However, even the act of perceiving a plant is not totally objective, as it is determined by the language users' cultural, social and individual backgrounds⁹².

The compound *Gansblume* is composed of the two nouns *Gans* 'goose' as a modifier and *Blume* 'flower' as the head-word; the variant *Gänseblume* uses

⁹¹ Corpus material is scarce in the area of plant names, and all historical dictionaries of German only offer a few citations, so no reliable conclusion can be drawn concerning this question.

⁹² Cf., for example, names for plants used for dyeing textiles exhibit the same naming strategy and focus in different languages. German compounds with *Färber-* like *Färberdistel* and *Färberwau* have counterparts with *dyer's* and *des teinturiers* in English and French respectively (*dyer's saffron* and *dyer's rocket*, *carthame des teinturiers* and *réséda des teinturiers*, also *herbe à jaunier* 'herb to dye sth. yellow').

the plural of *Gans*, and in the contemporary common form *Gänseblümchen*, the diminutive suffix *-chen* is added (causing umlaut in the 2nd component). According to Pfeifer (2005:396), it was first attested in middle of the 16th century, whereas Marzell's first citation *Gänsblümlein* (with diminutive *-lein*; 1, 555) dates from 1693. The non-diminutive *gänsblume* is attested around 1450, with the Frühneuhochdeutsches Wörterbuch (= FWB; Early New High German Dictionary)⁹³ offering the following citation⁹⁴:

Dornach nym praitten wegreich vnd spitzigen wegreich vnd lubstuckel vnd garben vnd eyssen-craut vnd walwurtz vnd die clain genß-plumen vnd haußwurtz.

'After that take flat plantain and pointed plantain and lovage and milfoil and vervain and comfrey and the small daisies and sempervivum.'

The variants of *Gänseblümchen* were taken to refer to different plants, but taking into account the attribute *klein* 'small' used here, it is rather likely that this citation is concerned with *Bellis perennis* L. (cf. Marzell 1, 555). Grimm's dictionary (= DWB; 4, 1, 1, 1267) records *Gänseblume* as the main entry, describing *Gänseblümchen* as its diminutive only. According to this entry, *Gänseblume* is used to name several meadow flowers ("von mehrern wiesenblumen"), in particular *Bellis perennis* (sense 1). Additionally, *Chrysanthemum Leucanthemum* ("die grosze gänseblume") is mentioned (sense 2), and – with a rather different appearance compared to *Bellis perennis* – dandelion (sense 3) and "*globularia vulgaris, bellis caerulea, blaue gänseblume*" (sense 4) are recorded⁹⁵. Early attestations can be found in MHG *gensebluome*, probably in the sense of *Bellis perennis* (MWB 2, 472 offers the sense "*Gänseblume*"), and then with the Latin gloss *ligustrum*, which can be interpreted as *Tanacetum vulgare* (MWB 2, 472: "Rainfarn")⁹⁶.

The name *Gänseblümchen* can be directly attributed to the goose itself as a literal translation: 'the geese' flower; flower for geese'. The naming process

⁹³ www.fwb-online.de/go/g%C3%A4nsblume.s.if_1513289644

⁹⁴ The source is a medical treaty, in this case a recipe for a healing ointment is presented.

⁹⁵ Marzell as well names *Chrysanthemum Leuc.* as being called *Gansblume* (1, 555).

⁹⁶ According to AWB (4, 216) this attestation probably refers to *Convolvus arvensis* L. (field bindweed).

might thus be influenced by the flower's appearance on the one hand (i.e. yellow carpel and white petals of the blossom are similar to white feathers and yellow beak of a goose), and by the bird's consumption of the plant on the other. Additionally, the plant's commonness and its use as fodder can be associated with worthlessness (Marzell 1, 556; Pfeifer 2005:396). A more complex interpretation takes into account the place where daisies usually grow and where geese used to be grazing, associating the first part of the compound with *Gänseanger* 'meadow where geese graze'.

Another compound is *Angerblümchen*, showing the same second element as *Gänseblümchen*. It consists of the nouns *Anger* 'meadow, green' and *Blume* 'flower' + diminutive *-chen*, again causing umlaut. Marzell (1, 558) records *Angerblümlein* first in 1600, a compound formed with the diminutive suffix *-lein* instead of *-chen*. The only historical dictionary⁹⁷ recording *Angerblume* is DWB (1, 349)⁹⁸. The short entry defines it as *Bellis perennis*, giving the synonyms "maszlieb, gänseblume". Concerning the naming strategy, *Angerblümchen* is most probably associated with the place where it typically grows, which is a 'meadow'. Taking into account the interpretation of *Gänseblümchen* that relates the name to the place where it can be frequently found ('meadow for geese', see above), the motivational background of both designations can be compared to some extent (cf. Sauerhoff 2001:131, 326).

The compound *Tausendschön* and its diminutive form *Tausendschönchen* can be traced back to the adjective compound *tausendschön* 'very beautiful, excessively beautiful' (literally: one thousand + beautiful), which is attested in the 16th century (Pfeifer, entry *tausend*⁹⁹; DWB 11, 1, 1, 225). The numeral *tausend* is used as an

⁹⁷ Adelung records it as well (1, 305); his dictionary, however, cannot be regarded as a historical dictionary in a classical sense as he has no diachronic corpus.

⁹⁸ The entry contains a single MHG citation only, which is not adequate to account for the compound: 'du bist kurzer, ich bin langer' / alsô strîtentz ûf dem anger / bluomen unde klê (engl. 'I'm shorter, I'm longer' / they argue like that on the meadow / flowers and clover).

⁹⁹ <https://www.dwds.de/wb/Tausendschönchen> – et-1 The online version of the Etymological Dictionary by Wolfgang Pfeifer which can be consulted at www.dwds.de is not identical with the print version, but there is no indication on which entries have been updated

intensifying particle here. As a name for *Bellis perennis L.*, and its double flowered variety in particular, *Tausendschön* is attested around 1600 according to Pfeifer, while it was used to name other plants earlier (DWB 11, 1, 1, 225)¹⁰⁰. The FWB records the plant name, only defining it as “eine Blume” (‘a flower’; 5, 308). The motivational background in naming the flower *Tausendschön* can very likely be found in the language users’ appreciation for its appearance (Marzell 1, 554).

Maßliebchen is regarded as a loan or a loan translation from Middle Dutch *matelieve* (Dutch *madelief*) that entered German early in the 15th century (Marzell 1, 546; Duden 7, 547). The earliest attestations of *Maßliebchen* in German are *maßleben* (14th/15th century, here glossed as *premula veris*, an old botanical name for *Bellis perennis L.*, cf. Marzell 1, 546) and *maßlieben* (1485), not yet showing the diminutive suffix *-chen*. Pfeifer (2005:846) suggests that the Middle Dutch form can be associated with Dutch dialect names such as *maagdelief*, *maagdelieve*, literally meaning ‘dear to the Virgin Mary’. However, it is important to note that there are competing interpretations concerning this first element. The *Woordenboek der Nederlandsche Taal* (= WNT; entry *madelief*)¹⁰¹ similarly asserts that the part *mate* is probably to be regarded as a variant of Dutch *maagd* ‘virgin’, here referring to the Virgin Mary in particular¹⁰².

An alternative explanation links the first part of the compound to Germanic **mat-* ‘food’ (cf. Old Saxon *mat*, *meti* ‘food’ and other West-Germanic and North-Germanic equivalents), thus referring to the belief that *Bellis perennis L.* has an appetizing effect, and translating the word as ‘lust for, desire to eat food’ (Marzell 1, 546; Pfeifer 2000:846)¹⁰³. This interpretation is further supported by the German

(see <https://www.dwds.de/d/wbetymwb>). The entry *tausendschön* contains additions concerning the flower *Tausendschönchen*.

¹⁰⁰ Cf. for example *circea*, *dircea*, *vitiflora*, *floramor* / *tausentschon* (Alberus dict. DD 2b) and *Solidago*, *heißt auch Maßlieben* / *vnd Braunell* (CC ijv). The nominalised adjective is also attested as a term of affection for a loved person (DWB 11, 1, 1, 225).

¹⁰¹ gtb.inl.nl/iWDB/search?actie=article&wdb=WNT&id=M038202&lemmodern=madelief

¹⁰² This analysis also connects the name to the designation *Marienblümchen* ‘Virgin Mary flower’, as both would basically have a similar denomination motive (cf. 3.2.3).

¹⁰³ This explanation is preferred by Kluge (2011, 605) and FWB (9, 1941, entry *masliebe*).

adjective *maßleilig* ‘not willing to eat, having an aversion to food’ (and its corresponding nouns), showing the same first element. According to Philippa et al. (=EWN 3:286), who discuss both explanations, a third interpretation seems to be more adequate: the first component in *madelief* is regarded as *made* ‘meadow, pasture land’. These variants – suggesting an association with *maagd* ‘the Virgin Mary’ – would thus be attributed to folk-etymological influence. Two historical dictionaries record an equivalent of the word: FWB has the entry *masliebe* (9, 1941), stating that it is often used in the diminutive form, but only offering citations in non-diminutive. The given sense is “Gänseblümchen”. DWB lists *Maszlieb*, *Maszliebchen* and *Maszliebe* (6, 1749), defining the first and second lemma as “gänseblümchen”. *Maszliebe* is first described as a flower name (“blumenname”), mainly referring to *Bellis perennis* (sense 1). Then, it is also recorded as referring to *acer campestris* (‘field maple’, sense 2).

Margerite is contemporarily usually used to designate plants of the species *Leucanthemum*, e.g. ox-eye daisy (*Leucanthemum vulgare* Lam.). Historically it was applied to different plants, among them *Bellis perennis* L. (Pfeifer 2005:838; Marzell 1, 550). Supposedly, it is a loan from French *margarite*, which was used as a name for several flowers itself¹⁰⁴. The first attestation in German referring to *Bellis perennis* is the compound *Margaritenblum* from 1580 (Marzell 1, 550)¹⁰⁵. Here the appearance of the daisy’s blossom with its white petals gave rise to the assumption that similarity to pearls played a role in motivating the naming process (Duden 7, 543; Sauerhoff 2001:132)¹⁰⁶.

¹⁰⁴ See the chapter on French in this book.

¹⁰⁵ An equivalent of the word with the sense ‘pearl’ was borrowed into German independently and probably directly from Latin earlier (Pfeifer 2005:838), cf. e.g. MHG *margarite* ‘pearl’ (Lexer 1, 2047). The entry *margarite* in FWB (9, 1853) only presents the sense ‘pearl’ as well, with the latest citations dating from the end of the 14th century. DWB as well provides no reference to the plant name, only recording the female name *Margarethe* (6, 1624).

¹⁰⁶ Pfeifer (2000: 838) additionally suggests that Late Latin *margarita* was used as a female name, being transferred to vernacular female names as well (e.g. German *Margarete*). According to this, the French version of the female anthroponym supposedly was then

Summing it up, most German names for 'daisy' or *Bellis perennis* L. show recurrent references (1) to appellatives that are connected to the appearance, the surrounding or the use of the plant, and (2) to the Virgin Mary. As the following analysis will show, some of these principles have occurred at (or borrowed into) the design of Estonian words for the common daisy as well.

ESTONIAN EQUIVALENTS IN CONTEMPORARY BILINGUAL DICTIONARIES

Two Estonian equivalents, *kirikakar* and *maarjalill*, are given for the English word 'daisy' in the English-Estonian dictionary (Silvet 2009:291). The same two equivalents can be found in many other bilingual dictionaries, for example German-Estonian *Gänseblümchen* 'kirikakar, maarjalill' (Kibbermann et al. 2007:436), *Maßlieb*, *Maßliebchen* 'kirikakar, maarjalill' (780); Russian-Estonian *маргаритка* 'kirikakar (*Bellis*)', *многолетняя маргаритка* 'harilik kirikakar (*Bellis perennis*), maarjalill' (VES 1,671), French-Estonian *pâquerette* 'kirikakar, maarjalill' (Kann 1995:442), Finnish-Estonian *tuhatkauno* (*Bellis perennis*) 'maarjalill, harilik kirikakar' (SES 2,519), and Swedish-Estonian *tusensköna* 'harilik kirikakar, maarjalill' (RES:1158). Some bilingual dictionaries prefer the Estonian equivalent *kirikakar*, like the Hungarian-Estonian *százszorszép* 'kirikakar (*Bellis perennis*)' (UES:708), Latvian-Estonian *mārpukīte* 'kirikakar' (LES:374), Norwegian-Estonian *tusenfryd* 'kirikakar' (Farbregd et al. 2005:372)¹⁰⁷.

'DAISY' EQUIVALENTS IN ESTONIAN CONTEMPORARY MONOLINGUAL DICTIONARIES

assigned to flowers and finally borrowed into German bearing this sense. Marzell (1, 551) asserts, too, that this plant name is commonly understood as being related to the female name *Margareta*. Pfeifer (2000: 838) additionally suggests that both French and German female names originating from *margarita* were used rather frequently and thus acquired the meaning '(simple) country girl'. Cf. ENHG *grete* (FWB 7,382), a shortening of *Margarete* which (besides being used as a name) also designates 'girl, woman' in a pejorative sense, specifically also meaning 'bad, immoral woman'. On the basis of this consideration, the female names can be associated with the aspect of commonness, which is attributed to the flower daisy as well.

¹⁰⁷ Cf. also German *Tausendschön*, *Tausendschönchen* 'kirikakar' (Kibbermann et al. 2007:1177), Finnish *kaunokainen* ... 2 '(*Bellis perennis*) kirikakar' (SES 1,459).

The two equivalents *kirikakar* and *maarjalill* can be found in the largest contemporary monolingual dictionary of Estonian, the *Estonian Explanatory dictionary* (EKSS) as well. For the word *kirikakar*, the Latin equivalent *Bellis* is given, thus being the taxonomic botanical name of the genus *Bellis* (EKSS:287). The word *maarjalill* is simply explained as ‘kirikakar’, i.e. a synonym (EKSS:294). Both names can be found in the normative dictionary of Estonian (ÕS 2013) as well. The taxonomic botanical name of the species *Bellis perennis* L. is *harilik kirikakar* ‘common daisy’, a compound term which is usually not included in common monolingual dictionaries of Estonian.

ESTONIAN VERNACULAR NAMES FOR ‘DAISY’

The Estonian vernacular plant names were mainly recorded by the botanist Gustav Vilbaste (earlier Vilberg, 1885–1967, *dr. phil. nat.* 1928, University of Vienna), during the first half of the 20th century. According to his thorough monograph (cf. Vilbaste 1993:188–189), many other names are used for ‘daisy’ in dialect/vernacular speech as well. In order to get a better overview over the variants recorded in detail by Vilbaste, it seems reasonable to group them according to their lexical composition. Thus, the names can be divided into four groups:

1) Names containing a variety of the Estonian female anthroponym *Maarja* ‘Mary’ (*Mari(i)e*, *Mari(i)a*, *Mari*, *Mai*, *Miia*). The majority of these names are compound words with different second components. Names belonging to this group are *mariienbluum*, *mariienblaum*, *mariienbloom*, *mariienploom*, *mariie(n) lill*, *mariialill*, *maarjalill*, *marilill*, *mailill*, *maarjahain*, *maarjakannike(ne)*, *maarjarohi*, *maarjaõis*, *mariie(n)roos*, *mariiaroosid* (pl.), *mariiaroes*, *marjanroosid* (pl.), *mairoos* (~ *mairuus*), *maieroes*, *miaroes*, *roosamariiad* (pl.). The standard name *maarjalill* belongs here as well. Sometimes the second component is lacking, as in *mariien*, *mariina*, *mariine*, *marinhenid* (pl.), *mariieke*.

2) Compound names consisting of other stems: *hanepersed*, *hanipersed*, *annepersed* (pl.), *kanapasalilled* (pl.), *piibupaabu*, *piibo-paabo*, *pii-paap*, *hanelillik*, *käsnalilled* (pl.), *maalilled* (pl.). The standard name *kirikakar*, having a limited dialectal background, represents this group, too.

3) Names associated with the female anthroponym *Margareeta* 'Margaret' (cf. German female name *Margareta*). The names *margareeta*, *markareeta*, *markakreeta*, *martakreeta* belong here.

4) Names representing variants of the stem *pell-*, like *pelis*, *pel(l)is*, *pell*, *pelle*, *pillad*, *vellid*.

ETYMOLOGICAL ANALYSIS

Considering their origin, the vernacular names for 'daisy' can be divided into two groups: 1) borrowed and variously adapted names, and 2) names that were probably formed on the basis of Estonian.

The majority of the vernacular names for 'daisy' belong to the group of borrowed and variously adapted names. This can be expected, because 'daisy' has not been a natural species in Estonia. Daisies have been growing in gardens probably since the last decades of the 18th century, and people learned about the plant with its foreign names. However, the plant has naturalized and can be found in parks, meadows, fallows, nowadays, and as a weed in lawns (Raudsepp 1981:143; ENE 4:541). Many names in this group are not direct loan words but apparent loan translations from a foreign source, in which the components of a compound word are usually replaced by their Estonian semantic equivalents. Most names are related to German sources.

The names *mariienbluum*, *mariienblaum* are borrowed from German *Marienblume*. The variants *mariienbloom*, *mariienploom* reflect Low German *marienblome* (there was a strong Low German influence as the German language once spoken in the Baltics, see above). Besides these names, there are many further adaptations of the mentioned loan source. The first component of German *Marienblume* is replaced by its Estonian equivalents and/or the second component is translated with various words meaning 'flower' or 'grass', as in the names *mariie(n)lill*, *mariialill*, *maarjalill*, *marilill*, (Est. *Maarja*, *Mari* 'Mary', *lill* 'flower'), *maarjahain* (Est. dial. *hain* 'grass'), *maarjakannike(ne)* (Est. dial. *kann(ikene)* 'flower'), *maarjarohi* (Est. *rohi* 'grass'), *maarjaõis* (*õis* 'blossom'). Thus, one of the standard names, *maarjalill* is the Estonian translation of a German name.

The loan source of the names *mariie(n)roos*, *mariiaroosid* (pl.), *mariiaroes*, *marjanroosid* (pl.) is German *Marienrose*, a name used for many plants including *Bellis* (cf. DWB, s.v. *Marienrose*). The order of the components of the German donor word is changed in the name *roosamariiad* (pl.).

The names *mariien*, *mariina*, *mariine* only reflect the first component of the loan source, so they could have derived from either of the German compound words *Marienblume* or *Marienrose*. The name *marinhenid* (pl.) may have developed the same way, but it is more likely to assume there has been some German diminutive source for it¹⁰⁸. The name *mariieke* contains Estonian diminutive suffix *-ke*.

Probably, also the names *mairoos* (~ *mairuus*), *maieroes*, and *miiaroes* are related to German sources. It seems not credible that these are borrowed from German *Mai-Rose*, known as a parallel name for another plant called *Zimt-Rose* (*Rosa majalis*) (cf. DWB, s.v. *Mairose*). It is more likely that they are related to German *Marienrose*; in Estonian, the first component is replaced with the Estonian female names *Mai* or *Miia*. Similarly, the name *mailill* may be related to German *Marienblume*. It would require further research to rule out whether or not these names might have any other foreign origin. Note that in F. J. Wiedemann's Estonian-German dictionary, German translation *Maiblümchen* is given to Estonian *kirikakar* (Wiedemann 1869:207; see 7.2.5).

The names *margareeta*, *markareeta*, *margakreeta*, *martakreeta* are obviously borrowed from German *Margerite*, *Margeritenblume*, *Margaritenblum* etc., especially if considering that cultural innovations were mediated primarily via the German language until the beginning of the 20th century. Russian *margaritka* has also been suggested as a loan source (cf. Vilbaste 1993:189). The Russian names are borrowed from either French or German (cf. Preobraženskij 1959:510), the German names from French.

¹⁰⁸ Marzell (1, 549) mentions a lot of variants resembling diminutives – e.g. *Marjen* or *Mardel* –, but *-blume* ‘flower’ appears in most of them.

The names *pelis*, *pel(l)is*, *pell*, *pelle*, *pillad*, *vellid* originate from Latin *bellis*. These names must be relatively recent (20th century) adaptations of the botanical name.

The occurrence of names formed on the basis of Estonian is much more restricted than that of borrowed names. Some names are used not only for 'daisy', but for some other species simultaneously, e.g. for *Leucanthemum vulgare*. It often happens that non-experts mix the names of different plants with rather similar flowers.

The standard botanical name *kirikakar* is a compound consisting of the components *kiri* + *kakar*. The first component *kiri*- is probably related to the Estonian word *kirju* 'many-coloured', a derivative of the Finnic stem **kirja*, cf. Est. *kiri* 'pattern, ornament; letter', Fin. *kirja* 'book; list, document; pattern, ornament', Fin. derivative *kirjo* 'many-coloured cow, ox etc.' (see SKES:198, SSA 1,369). The second component *kakar* is used in the names of several composite plants, e.g. *karikakar* 'genus *Anthemis*', dial. 'ox-eye daisy (*Leucanthemum vulgare*)', *kitsekakar* 'genus *Doronicum*' (Est. *kits* 'goat'). The word *kakar* has equivalents also in the other Finnic languages, e.g. Votic *kakkara*, *päiväkakkara* 'sunflower (*Helianthus*)', Finnish *päivänkakkara* 'ox-eye daisy (*Leucanthemum vulgare*)' (see SKES:145-146). It might be a derivative of the stem Est. *kakk* 'loaf, cake, scone', Fin. *kakku* 'cake' (see SKES:145-146, EEW:660), which is a Scandinavian or an Old Swedish loanword, cf. Old Swedish *kaka* 'cake, bread' (SSA1:281, LÄGLOS:16).

The names *hanepersed*, *hanipersed*, *annepersed* (pl.) consist of the components *hani* 'goose' + *perse* 'arse'. The components of the name *kanapasalilled* (pl.) are *kana* 'hen' + *pask* (GEN *pasa*) '(diarrhoeal) excrement' + *lill* 'flower'. The name *hanepersed* is recorded also for 'ox-eye daisy' (*Leucanthemum vulgare*) and the name *kanapasalill* for 'wild camomile' (*Matricaria discoidea* ~ *Matricaria matricarioides*; cf. Vilbaste 1993:397, 420). The name *piibupaabu* (*piibo-paabo*, *pii-paap*) is also recorded for *Leucanthemum vulgare* (see Vilbaste 1993:397). The latter resembles Estonian descriptive pair words, for which the etymology is not clear. Some compound names seem to be random formations, e.g. *hanelillik* (*hani* 'goose' + *lillik* < *lill* 'flower' and *käsnalilled* (pl.) (*käsn* 'sponge; wart' + *lill* 'flower'), cf.

German Gänseblümchen *maalilled* (pl.) (*maa* ‘earth’), cf. German Maaßlieben– seem to have been accidental formations.

HISTORICAL LEXICOGRAPHIC ANALYSIS OF ESTONIAN NAMES FOR ‘DAISY’

As ‘*daisy*’ was not a natural species in the territory of Estonia, the oldest dictionaries (i.e. bilingual dictionaries from the 17th and 18th century) do not contain designations for it. Two names are recorded in F. J. Wiedemann’s Estonian-German dictionary, first published in 1869, which is the most complete and valuable collection of 19th century Estonian vocabulary. These names are *kirikakar*, explained as ‘Maiblümchen (*Bellis perennis* L.)’ (Wiedemann 1869:207) and *hane-persed* ‘Maasslieben (*Bellis perennis* L.)’ (884). The same names occur in the second edition of the dictionary (see Wiedemann 1973 (1893): 188, 802).

Some names for ‘*daisy*’ are recorded in the conceptual dictionary of Estonian, a large collection of Estonian vocabulary by dialectologist Andrus Saareste (earlier Albert Saaberk, 1892–1964, *dr. phil.* 1924, University of Tartu). In Saareste’s data, we can find *kirikakar* or *maarjalill*, *maarjaroos*, *maarjaninn* (‘Mary’ + ‘flower’) ‘*Bellis perennis*’ (Saareste 1962:1118, 1127).

The three-volume normative dictionary (EÕS), published from 1925 to 1937, fixed the literary standard of Estonian, which had become the official language of the state at the formation of the independent Republic of Estonia in 1918. The Estonian scientific terminology, systematically worked out mainly in the 1920s, makes an important part of this dictionary. This means that it also has names that belong to the biological taxonomy, among them the standard botanical names for ‘*daisy*’, which are still used in the 21st century: there are *kirikakar*, explained as ‘aialill [‘garden flower’]: *Bellis*, [Gm] ‘Tausendschön’ (EÕS 1:222), and *maarjalill* = *kirikakar* (456). Although EÕS is a monolingual dictionary in general, terms are usually provided with their Latin and/or German equivalents.

The dictionary of the Estonian dialects (EMS) contains dialectal vocabulary, systematically collected during the 20th century. In the published parts (A-N) of the dictionary, only a few names occur that have been recorded for ‘*daisy*’ in Vilbaste’s data. There are *haniperse* (EMS I, 364), *mailill* (EMS V, 907), and *mairoos* (EMS

V, 909). None of them is explained as ‘Bellis’ but only very generally as ‘taim’ [‘plant’] or ‘lill’ [‘flower’]. An explanation might be that most of the Estonian dialect vocabulary has been recorded by people who were no experts in botany. Therefore, no accurate botanical information is given in many cases. As the same names were used for several plants with similar blossoms, it is more likely that these names refer to other species. Some names which are used for ‘daisy’ according to Vilbaste’s monograph occur only as names of other plants in EMS, e.g. *kanapasalill* 1. ‘valge või kollane karikakar’ [‘corn camomile, *Anthemis arvensis* L. or yellow camomile, *Anthemis tinctoria* L.]; 2. ‘tulikas (Ranunculus)’ [‘buttercup’] (EMS II: 633); *maarjahain* ‘maarjahein’ [‘sweet vernal grass, *Anthoxanthum odoratum*’] (EMS V, 845); *maarjarohi* (taim) [‘plant’] (EMS V: 848; based on example sentences, this is used for a plant with fragrance, probably sweet vernal grass).

SUMMARY AND OUTLOOK

Based on the historical and etymological analysis of equivalents for ‘daisy’ / *Bellis perennis* L. in German and Estonian, we suggest the following statements as the main outcomes:

- There are numerous designations for the common daisy in both German and Estonian.
- These designations can be found in both monolingual and bilingual (historical) dictionaries, indicating that daisies exist in both countries.
- The designations are based on certain – and sometimes several – motivational backgrounds, not all of which are clear.
- In both languages there are names that can be explained as being motivated by the appearance of the common daisy (as perceived by humans; i.e. German: *Gänseblümchen*, *Tausendschön*; Estonian: *kirikakar*, possibly *hanepersed*, *hanelillik* and others). This principle has resulted in a number of ‘daisy’ designations that are compounds.
- The Virgin Mary seems to be a recurrent motive for ‘daisy’ designations in both languages, as a result of borrowings of German designations like *Marienblume* into Estonian.

- These borrowings are the result of territorial and thus cultural connections between these two languages, which are basically unrelated on a linguistic level.

In the course of our analyses, we also found that it is not always possible to identify the actual flower on the basis of a name/designation. German *Margarite* or *Margaritenblume*, for example, used to be connected historically to *bellis perennis* (cf. Pfeifer 2005:838; Marzell 1, 550), but is contemporarily usually used to designate plants of the species *Leucanthemum*. Consequently, when searching for the common daisy in dictionaries, the botanical reference – i.e. the taxonomic designation – is a designation that might be considered rather free of ambiguities. The following table presents said findings in a concise way:

Estonian		German	comments
<i>mariienbluum</i> , <i>-blaum</i> <i>mariienbloom</i> , <i>-ploom</i>	borrowed from borrowed from	<i>Marienblume</i> LG <i>marienblome</i>	----
<i>maarjalill</i> [<i>mariie(n)lill</i> , <i>mariialill</i> , <i>marilill</i> , a.o. variants]	loan translation/ adaptation of	<i>Marienblume</i> / <i>marienblome</i>	----
<i>mariie(n)roos</i> [<i>mariiaroosid</i> (pl.), <i>mariiaroes</i> , <i>marjanroosid</i> , a.o. variants]	borrowed from	<i>Marienrose</i>	<i>Marienrose</i> is rather uncommon in Germ. as a name for <i>bellis per.</i>
<i>mairoos</i> (~ <i>mairuus</i>) [<i>maiaroes</i> , <i>miiaroes</i>]	?borrowed/adapted from	<i>Marienrose</i>	unlikely to be borrowed from Germ. <i>Mairose</i> (<i>Rosa majalis</i>) cf. Germ. <i>Maibloom</i> – a name for <i>bellis per.</i> in North German
<i>margareeta</i> [<i>markareeta</i> , <i>margakreeta</i> , <i>martakreeta</i>]	?borrowed from	<i>Margerite</i> , <i>Margarite</i>	?borrowed from Russ. <i>margaritka</i>

Table 4: Lexical equivalents of Estonian and German ‘daisy’ designations

Daisies in the European Roots prototype

A way of making the information that we have gathered in the previous sections available is to present it in a multilingual dictionary that refers to all the European languages already considered and any forthcoming addition. The ER prototype (as outlined by Villalva and Silvestre 2015 and further developed in a previous chapter of this book) was designed to fulfill that goal.

In this section, we will display the ER entry related to the Latin word *margarita* ‘pearl’, that has provided many words to many European languages, one of which is a flower name, sometimes equivalent to ‘daisy’. We will show the main entry and three subentries (German, Modern Greek and Portuguese).

The main entry includes the Latin word (i.e. *margarita*), its POS specification (i.e. feminine noun) and its relevant meanings (considering the legacy of the word in the contemporary European languages). In this case, we have registered two meanings: (i) pearl and (ii) female anthroponym. Each of these meanings is documented by a credible reference. Finally, we also include a brief etymological source that goes as far back as possible – in this case, the Latin word has a HelG etymon, that was preceded by an Old Persian ancestor:

Latin

margarīta n_f – (i) pearl *ne mittatis margaritas vestras ante porcos Vulg. Matt. 7, 6. (Lewis & Short, s.v. margārīta)*

sources DELL

– (ii) female anthroponym *Sancta Margarita (?)*

sources ???

< Hellenistic Greek μαργαρίτης (*margarītes*) n_m – pearl sources BEEKES

< Old Persian (**mrga-ahri-ita-*) n – lit. born from the shell of a bird, e.g. oyster sources Beekes 2010, pp. 904-905; Gershevitch 1989

OBS cf. Middle Persian *marvārīt*, Modern Persian *marvārēt* ‘pearl’

The German subentry also shows a strong connection between the flower and the female anthroponym, as the word *Margerite* was borrowed from French *marguerite*. Historically, a *Margerite* also denoted a ‘daisy’, as has been shown in the above section, even though *Gänseblümchen* became more common over time.

German

- **Margerite, Margarethen** ... n_f Composite plant showing a yellow flower head and white petals (Leucanthemum vulgare Lam.) Historically it was applied to different plants, among them Bellis perennis L.
a quo: [1777]
(sources: Pfeifer 2005:838; Marzell 1, 550)
◀ French *marguerite* (sources: Marzell 1, 551)
cf. *Gänseblümchen*
 - **Margaritenblum** n_f 'daisy'
a quo: [1580]
 - **Margarethenblümlein** n_f 'daisy (dim)'
a quo: [1673]
- **Margarete (Margarethe, Margret, ...)** female anthroponym
 - **Grete** n_f pejorative female anthroponym ('girl, woman'). In the 16th/17th century, 'bad immoral woman'.

The MG subentry provides a short description of the kind of plants that CMG relates with 'daisy' (in dictionaries published from 17th to 21st centuries). Furthermore, it presents a new etymological hypothesis regarding the Old Italian predecessor of MG [marya'rita], i.e. the direct predecessor of the form *margarita* is the Latin *margarita* and not the French *marguerite*, which, on the other hand, by developing the meaning 'daisy', influenced the meaning of the Italian *margarita* (originally meaning 'pearl').

Modern Greek

- **Margerite** [marya'rita] n In the 18th century (or even in the late 17th century) [marya'rita] was used as a designation for asteraceae with white or yellow petals. In the first half of the 20th century, [marya'rita] is described as 'leucanthemum chrysanthemum'. In MG, [marya'rita] is probably a 'common term for plants belonging to different genera and species'
a quo: []
(sources: Somavera, Dimitrakos, DCG, GOD)
◀ Hellenistic Greek 'pearl' (sources:)
◀ Old Italian *margarita*
cf.

The Portuguese subentry gathers four headwords that are etymologically related to the Latin *margarita*. The first is *margarita* (meaning ‘pearl’) that is documented since the 13th century, but is now an unused word. The second has two alternate forms (i.e. *Margarita* and *Margarida*) that refer a female anthroponym attested since the 13th century and still in usage (*Margarida* being largely preferred in European Portuguese). These proper nouns allow the formation of two other female anthroponyms by truncation (cf. Rita) or truncation and a phonetic change (cf. Guida). The third headword is the flower name *margarita*. Though we can find it in several dictionaries it is unused now and we may suspect that it was never used. Finally, there is the flower name *margarida* and its first attestations, the sources where we can find it as well as an etymological hypothesis regarding the semantic loan of the French word *marquerite* meaning ‘daisy’. Finally, this entry is related to the other entries that are semantically equivalent (cf. *malmequer*).

Modern Greek

- **Margerite** [maryaˈrita] n [In the 18th century (or even in the late 17th century) [maryaˈrita] was used as a designation for asteraceae with white or yellow petals. In the first half of the 20th century, [maryaˈrita] is described as ‘leucanthemum chrysanthemum’. In MG, [maryaˈrita] is probably a ‘common term for plants belonging to different genera and species’]
- a quo: []
- (sources: Somavera, Dimitrakos, DCG, GOD)
- < Hellenistic Greek ‘pearl!’ (sources:)
- < Old Italian *margarita*
- cf.

Portuguese

- **margarita** [mɛrʒe'rite] n_f **pearl**
 - a quo: [13th century] *sobre ella nom parecia, se nom ouro e pedras margaritas preçiosas e de gram vallon (Vidas de Santos de um Manuscrito Alcobacense)*
 - ad quem: [19th century] *margarita, s.f. Perola. Morais (1813)*
 - UNUSED (sources: CdP Bluteau18 Morais19 Figueiredo20)
 - < Latin *margarīta* n_f **pearl** (sources: AGCUNHA)
- **Margarita, Margarida** [mɛrʒe'rite], [mɛrʒe'ride] female_n **female anthroponym**
 - a quo: [1497] *De sancta Margarita (Gonçalo Garcia de Santa Maria, Euangelhos e epistolas con suas exposições en romãce)*
 - a quo: [13th century] *O mynha senhora e amyga Margarida que mal te hey eu facteo?*
 - { Eng. Margareth Fr. Marguerite }
 - (sources: CdP)
 - < Latin *margarīta* female_n **female anthroponym**
 - **Rita** ['rite] female_n **female anthroponym** (sources: CdP)
 - **Guida** ['gide] female_n **hypocharistic female anthroponym** (sources: CdP)
- **margarita** [mɛrʒe'rite] n_f **flower name**
 - a quo: [1798] *Bellis, idis, f. Plin. Margarita, flor. Fonseca)*
 - ad quem: [1913] *Nome de várias plantas, da fam. das compostas. (Figueiredo)*
 - UNUSED (sources: Fonseca18 Figueiredo20)
 - HIP 1 < Castilian *margarita* n_f (sources: Villalva et al. 2018)
- **margarida** [mɛrʒe'ride] n_f **flower name**
 - a quo: [17th century] *Bellis, is, f. g. vel Bellius, ii, m. g. Casta de herua, ou flor Margarida (Pereira 1697)*
 - (sources: Pereira17 Fonseca18 INFOPEIDIA)
 - HIP 1 < French *marguerite* (semantic loan) **flower name** (sources: Villalva et al. 2018)
 - cf. *bem-me-quer; bonina; malmequer; pampilho*

Figure 4: Sample entry (LandLex)

Summary and outlook

The survey presented in this chapter demonstrates that the choice of such a common word like 'daisy' did not lead to an unproblematic research. In fact, we came to the conclusion that the equivalents of 'daisy' are not straightforwardly found in any of the languages that we have considered. The introduction of

botanical classifications (still under discussion, but basically established in the 17th and 18th centuries) allowed the mapping of vernacular names into scientific tags, but most speakers and most lexicographers certainly lacked the amount of specialised knowledge that would have prevented ambiguous and equivocal definitions that we have dominantly found in all the languages. But the botanical classifications are of little help when we try to understand the names that the flowers had in the past. Therefore, though we initially aimed to focus on *bellis perennis*, we have finally included several names that gravitate around this and other kinds of daisies.

The equivalents of ‘daisy’ that we have found in contemporary bilingual dictionaries revealed a strong presence of the descendants of the Latin *margārīta* in the western Romance languages and in MG. Though they are not dominant, cognates of the Latin *margārīta* are also present in the other languages (i.e. German, Romania and Estonian). It is not totally clear how the original meaning of the AG *μαργαρίτης* [margaritēs] (i.e. ‘pearl’) evolved to become the name of a specific wild flower. Probably, the semantic shift took place through a metaphoric use in French, in the 13th century. In some Romance languages (e.g. French *marguerite*, Portuguese and Galician *margarida*, and Italian *margherita*), the meanings ‘pearl’ and ‘daisy’ may have coexisted for some time, but only the ‘daisy’ meaning is now active. In other languages, only the ‘daisy’ meaning (and particularly the *leucanthemum* connection) was adopted. That is the case of the German *Margerite*, that goes back to the French *marguerite*, the Romanian *margaretă*, that goes probably directly back to the German *Margarete*, and the Estonian *margareeta*, *markareeta* and *margakreeta*, that probably also go directly back to the German *Margerite*. Similarly, MG *μαργαρίτα* [marɣaˈrita] was borrowed from the ‘daisy’ meaning of the Italian *margarita*. If we also consider the first attestations that we have found, we get a general picture that shows the spreading of the French *marguerite* into German in the 16th century (and subsequently to Romanian, in the 19th century, and Estonian, in the 20th century), and to Italian, also in the 16th century (and subsequently to MG, in the 17th century). The spreading to the

west seems to take place later – the Portuguese *margarida* is first attested in the late 17th century.

A tentative timeline for the spreading of the French *marguerite* elies in the following moments in time:

- i. The semantic shift is documented in French in the 13th century (bot. flors des margerites «pâquerette»);
- ii. The German borrowing (i.e. *Margeritenblum*) dates from 1580;
- iii. The Italian borrowing dates from 1591. (Margarita, a pearl, a margarite, a gem. Also a flower called a daizie);
- iv. The Portuguese borrowing dates from the end of the 17th century (Bellis, is, f. g. vel Bellius, ii, m. g. Casta de herva, ou flor Margarida. apud [Pereira A]);
- v. The Romanian borrowing probably occurred in the 19th century;
- vi. The Modern Greek borrowing takes place in the 17th century (meaning *calendula*) and in the 20th century (associated to *leucanthemum chrysantemum*);
- vii. The German borrowing is first recorded in the 16th century;
- viii. The Estonian borrowings emerged in the early 20th century.

The set of other words that we have found is also quite interesting. We have found a small set of rather unused words that descend from the Latin word *bellis*. This is the case of the Italian *bèllide* and the Galician *belorita/bilorita/velorita/vilorita*. This is also the case of the Portuguese *bonina*, the Galician *bonina* and the Romanian *bănuț*, though all these words originate in the word from which *bellis* derives, which is *bonus*. It is also worth mentioning that the German name *Tausendschön(chen)*, and the Romanian name *floare frumoasă* have no etymological links with *bellis*, but they look like semantic loans from the Latin *bellis*. Finally, *bellis* is the Latin name assigned (probably by Linnaeus) to several plants, one of which is *bellis perennis*, but, as we have seen, there is little way to know if the plant the Romans called *bellis* is Linnaeus' *bellis perennis* or any other botanical

species. Botanical Latin *bellis* is probably the origin of the Estonian dialectal *pelis/pellis/pell/pelle/pillad/vellid*, an unexpected Latin outcome.

Another semantic *locus* that we find in many languages is related to the place where *daisies* typically grow: meadows. As we have seen, this is the case with the Italian *pratolina*, *prataiola*, *prattelina* (from the Latin *pratus* ‘meadow’), the German *Angerblümchen* (lit. ‘meadow flower + dim’) and, hypothetically, with the Portuguese *pampilho* (if it is related to the word *pampa*, of Quechuan origin, that means ‘pasture’ and is a common word in South-America) . But we should also consider the Galician words *ponmerendas* and *quitamerendas*, since picnics (i.e. *merendas*) often take place in meadows. German words such as *Gänseblümchen* (lit. ‘goose flower+dim’) and maybe *Maßliebchen*, as well as the Estonian *hanepersed* (lit. ‘goose+arse’), *hanelillik* (lit. ‘goose+flower’) and *kanapasalilled* (lit. ‘hen+excrement+flower’) enclose no direct reference to meadow but they do belong to a close semantic field of farm animals. Finally, the French word *pâquerette* and the Romanian *păscuță* have been related to the alleged time of blossoming (cf. French *Pâques*, Romanian *Paște*), which seems to be the case with the Italian *primo fiore* (lit. ‘first flower’) and *fiore di primavera* (lit. ‘first flower’), the MG [‘aniksi] (lit. ‘Spring’) and [marto’luluðo] (lit. ‘March flower’), and the German *Monatsblümlein* (lit. ‘month flower + dim’). However, *pâquerette* and *păscuță* can also be etymologically related to the latin *pratus* ‘pasture’. Therefore, though most the words involved are not cognates, the reasoning behind this assignement of a name to a ‘daisy’ looks very similar.

The reference to the size of the flower also deserves some comment. German uses a diminutive suffix quite systematically (e.g. *Gänseblümchen*, *Maßliebchen*, *Tausendschönchen*, *Angerblümchen*). The same occurs with the Italian *margheritina*, the Portuguese and Galician *bonina*, or the MG [a’spropulo] (lit. ‘little white ones’).

Finally, we have also found some local naming strategies. Some languages highlight the colour(s) of the flower (cf. MG [aspro’luluðo] lit. ‘white flower’, [a’spropulo] ‘lit. little white ones’; Estonian *kirikakar* ‘many-coloured round blossom’ German *Gänseblümchen*, since the geese have white feathers and a yellow beak). Romanian *butculiță* (lit. ‘little bottle’) refers the shape of the flower, and both

MG [astro'luluðo] and Romanian *scânteuță* bring a sparkle metaphor. German (e.g. *Marienblümchen*) and the Estonian translated loan (e.g. *maarialill*) have an ecclesiastic origin that somehow relates these flowers to the Virgin Mary. And, finally, Portuguese *malmequer* and Galician *ben-me-quer*, based on the conversion of a rhyme (i.e. X loves me / X loves me not), relate to a folk belief in the domain of romantic interaction.

Descriptions of this kind are not easily obtained. They require a convenient access to several monolingual and bilingual lexicographic sources, as well as historical and contemporary *corpora*, whenever these sources are available. The selection of this sources, their availability in a common platform such as ER, an effective data extraction and the reunion of the produced results in an elegant and readable form, made freely available to specialists and non-specialist as well, are the purpose of the research pursued by the Landlex group.

The 'daisy' case study has allowed us to conclude that it is difficult if not impossible to determine the correspondence of plant names and their referents along the history of the words and across each language, language variation and different languages. Uncovering similarities and divergences from nonlingual and cross-linguistic lexicographic analysis and from diachronic and synchronic observations has proven to be a useful strategy to consolidate monolingual findings and information gaps. But, resuming our initial question, what do lexicographers need to know about plant names?

It is quite uncontroversial for the authors of this chapter that the botanical reference should be the only stable language hub (preferably linked to an image). The description of each plant according to the guidelines established in the previous chapter should also be followed (morphological features, flowering periods, etc.). And etymological notes as well as brief accounts of the so called folk wisdom (folk etymology). But probably the most important remark is that lexicographers should be well aware of the limits of the information that they can gather and hence convey. Dictionaries portrait the speakers' knowledge of words. In this domain (plant names), like in many other, speakers have a limited knowledge – dictionaries should mirror that common-sense knowledge and complement it

with a basic specialized content or the acknowledge that the mapping between common-sense and science can not be established. Eventually, the future will bring us the information that we lacked, which is why a dynamic lexicographic model is so relevant.

V. Colour words

Irrealia words and colour names

Alina Villalva

TESTAMENTO¹

Lego aos meus amigos
um azul cerúleo para voar alto
um azul cobalto para a felicidade
um azul ultramarino para estimular o
espírito
um vermelhão para fazer circular o sangue
alegremente
um verde musgo para acalmar os nervos
um amarelo ouro: riqueza
um violeta cobalto para sonhar
um garança que faz ouvir o violoncelo
um amarelo barite: ficção científica, brilho,
resplendor
um ocre amarelo para aceitar a terra
um verde veronese para a memória da
primavera
um anil para poder afinar o espírito pela
tempestade
um laranja para exercer a visão de um
limoeiro ao longe
um amarelo limão para a graça
um branco puro: pureza
terra de siena natural: a transmutação do
ouro
um preto sumptuoso para ver Ticiano
uma terra de sombra natural para aceitar
melhor a melancolia negra
uma terra de siena queimada para noção de
duração

WILL

I leave my friends
a cerulean blue to fly high
a cobalt blue for happiness
a ultramarine blue to arouse the spirit
a vermilion to incite the blood to circulate
joyfully
a moss green to soothe the nerves
a golden yellow: wealth
a cobalt violet to dream
a madder that makes the cello be heard
a barite yellow: science fiction, glow,
resplendence
a yellow ochre to accept the earth
a Veronese green for the memory of spring
a indigo to refine the spirit through the
storm
a orange to exercise the vision of a distant
lemon tree
a lemon yellow for the grace
a pure white: pureness
natural sienna: the transmutation of gold
a luxurious black to see Ticiano
a natural umber to better accept the black
melancholy
a burnt sienna for the notion of
duration

¹ This is a poem by Vieira da Silva (1908 – 1992), who was a Portuguese abstractionist painter (cf. https://en.wikipedia.org/wiki/Maria_Helena_Vieira_da_Silva). The English version is our translation.

In the previous chapters we have discussed words that have a physical, observable, measurable referent. The dominant feature of those discussions may be that even though ‘*hills*’ and ‘*daisies*’ have a physical, observable, measurable existence, their names are difficult to characterise – they are exposed to historical circumstances that generally led to the accumulation of words in the lexicon, constantly having to negotiate their meanings that often get misled interpretations, both by speakers and by lexicographers. Hence the difficulty to depict their actual contemporary meaning, and to set it apart from previous senses.

The words that we will now consider don’t have a physical existence. According to Woleński (2012), Brentano’s ontological theory of beings regards ‘things’, which he calls *entia realia*². Left out are “all items belonging to *irrealia*” that have “the status of *entia rationis* (beings in the mind or thought objects)”. *Irrealia* beings refer to individual experiences that depend on strictly idiosyncratic, changeable and incomparable factors. They cannot be unequivocally depicted, clearly measured or thoroughly weighted. In fact, *irrealia* beings exist through their names, but philosophical, physiological, psychological, or cultural expertise are insufficient or inadequate to deal with the lexical issue of relativity that is their core feature. Colours belong to these *irrealia* domains of human existence and this is why LandLex chose one – *red* – to assess the degree of difficulty they present to lexicography.

Colour is most certainly a multidisciplinary subject matter. Osborn (2015) presents a historical survey of books on colour, setting a considerable number of tags³ that help to describe the contents of each listed book. The lexical issues

² Franz Brentano (1838-1917) was a German philosopher mainly known for his work in philosophy of psychology. [plato.stanford.edu/archives/fall2016/entries/brentano/].

³ Cf. architecture, chemistry, classification, colorants, computing and television, decoration, design, dress & cosmetics, dyeing, flora and fauna, food, glass, history, lighting, metrology (colorimetry & photometry), music, optics & spectroscopy, painting, perception & experimental psychology, philosophy & aesthetics, photography & cinema, printing, psychology & perceptual psychology, symbolism & religion, terminology, therapy, vision.

are covered by the tag ‘terminology’ (assigned to more than one hundred titles), which the author introduces as follows:

“Since Telesio 1528, many texts have explored the TERMINOLOGY and etymology of colour and (latterly) semantics and language. [...]”

TERMINOLOGY (Including Language)
See AMMER 1992, ANDRE 1949, ARIAS 1994, BARROW 1735, BAYLEY 1912, BENNETT 1988, BERLIN 1969, BIDU-VRANCEANU 1976, BIESALSKI 1957, BIGGAM 1997 2012, BLUMNER 1892, BORG 1999, BRADLEY 2009, BRENNER 1982, BURNHAM 1962, CHATFIELD 1955, CHEVREUL 1861, CLARKE 2003, DEDRICK 1998, DELITZSCH 1888 1889, DOERNER 1921, DOLCE 1565, EDGEWORTH 1992, ESPEJO 1990 1996, FÉLIBIEN 1676, FISCHER 1965, GLADSTONE 1858, GRADWOHL 1963, GROSSMANN 1988, GUILLEMARD 1998, GUINEAU 2005, HÄRD 1979 1984, HARDIN 1997, HARRIS 1776, HATT 1908, HAY 1845, HAYTEN 1958, HELLER 1989, HEMPSTEAD 1931, HOSONO 1974, IRWIN 1974, JAPAN 1959, JODIN 1903, JONES 2013, KAY 2001 2009, KENYŪJO 1974, KERTTULA 2002, KOBAYASHI 1991, KOBER 1932, KÖRNERUP 1961 1963, KOSTER 1931, KOUWER 1949, KRISTOL 1978, KUNO 1999, LIBONIS 1880, LOYNES 1959, MACLAURY 1997, MAERZ 1930, MAGNUS 1877, MAXWELL-STUART 1981, MÉNESTRIER 1661, MOLLARD-DESFOUR 1998, MÜLLER-BORÉ 1922, NADDAIR 1999, NATIONAL 1955, NEWHALL 1949, OBERTHÜR 1905, OHTSUKI 2000, OSBORNE 2015, OTT 1899, PASTOUREAU 1992, PATERSON 2003, PERROT 1834, PHYSICAL 1948, PLOCHÈRE 1946, PRANGE 1782, PRATT 1898, RIDGWAY 1886 1912, RITTER 1794, ROESZTLER 1868, RONCHI 2013, RÖSEL 1746, SACHS 1665, SACCARDO 1891, SAUNDERS 1992, SCHÄFFER 1769, SCHIPMAN 1936, SCHULTZ 1904, SEUFERT 1955, SÈVE 2007, SLOANE 1989, SMITH 1825, SMITHE 1974, SMYTH 1864, SOUTHWORTH 1992, STEINVAL 2002, SYME 1814, TAYLOR 1950, TELESIO 1528, THEROUX 1994 1996, TORNAY 1978, VANDERPOEL 1902, VELS HEIJN 1951, VERBRAEKEN 1997, VINÇARD 1820, WARHURST 1899, WEBER 1923, WIJK 2001, WILSON 1938 1949, WOOD 1902 & WYLER 1992 2006

The list of references is quite impressive and yet the list could be expanded and the lexicographic approach to colour words is still open to discussion.

Language-specific colour naming systems reveal striking similarities. Berlin & Kay (1969) claimed that the number of basic colour categories ranges from three to eleven, which is the number that can be found in most European languages. According to these authors, three kinds of universal colour name categories must be considered: primary opposed colours; derived colours that are the output of a mixture of primary colours; and composite colours that are obtained by a fuzzy union of primary colours. In the example here below (left column), we can see English simplex names for the first two sets – eleven, to be precise – and coordinated word compounds in the third set. The same applies

to the Portuguese case (right column) and probably to other language cases too (cf. Silvestre, Villalva & Pacheco 2014):

PRIMARY OPPOSED COLOURS

black *white*
red *green*
yellow *blue*

DERIVED COLOURS

gray
pink
orange
purple
brown

COMPOSITE COLOURS

green-blue
white-red-yellow

PRIMARY OPPOSED COLOURS

preto *branco*
vermelho *verde*
amarelo *azul*

DERIVED COLOURS

cinzento
rosa
laranja
roxo
castanho

COMPOSITE COLOURS

verde-azulado /azul-esverdeado
banco-vermelho-amarelo

Another commonality between language-specific colour systems lies in the fact that correlations between colour names and the names of physical entities may be established. Correlations between colour names and plant names can be commonly found (cf. Port. *rosa* ‘pink’, from the flower *rose*, or Engl. *orange*, from the name of a citrus fruit)⁴; the same applies to animal names (cf. *purple*, from the name of a shellfish) or substances of various kinds (cf. Port. *cinza* ‘grey’, from the colour of ashes). In some cases, the same correlations can be found in different languages (cf. Port. *castanho* ‘brown’, from the Portuguese name of the chestnut fruit, and French *marron* ‘brown’, from the French name of the same fruit). A translation can also be found in competition with direct borrowing (cf. Port. *cor de tijolo* ‘orange-brown’, from the colour of bricks, and Port. *brique* ‘orange-brown’, from the Fr. *brique* ‘brick’, that can also be used as a colour name). The correlation may even be established with a non-translated loan (cf.

⁴ Cf. the chapter on plant names, in the previous chapter.

Port. *bordeaux* 'burgundy', from the French toponym⁵ that is also a wine name). Other correlations between colour names and the names of different entities are related to what we may call metaphysical speculation. This is the case of the link between colour and emotion names that may be illustrate by cases such as the following:

- | | |
|------------------------------------|----------------------------------|
| (1) Eng. <i>white with anger</i> | |
| Eng. <i>red with embarrassment</i> | |
| Eng. <i>to feel blue</i> | |
| Pt. <i>verde da esperança</i> | 'green of hope' |
| Pt. <i>vermelho da paixão</i> | 'red of passion' |
| Pt. <i>vermelho de raiva</i> | 'red of anger' |
| Pt. <i>ficar vermelho</i> | 'to turn red with embarrassment' |

Notice that, in this case, the commonality occurs between a colour name and a state of mind, but the association is changeable: in Portuguese, *vermelho* 'red' may be associated with three quite different emotions (i.e. passion, anger and embarrassment). These correlations are often found in fixed expressions that range from collocations to idioms and aphorisms, which brings us closer to the correlation of colour names and social stereotypes. Consider the following examples:

- | | | |
|--|---------------------------|----------------------------------|
| (2) Pt. <i>mercado negro</i> | lit. market black | 'black market' |
| Pt. <i>ovelha negra</i> | lit. sheep black | 'black sheep' |
| Pt. <i>cor política</i> | lit. colour political | 'political colour' |
| Pt. <i>sangue azul</i> | lit. blood blue | 'blue blood' |
| Pt. <i>linha vermelha</i> | lit line red | 'red line' |
| Pt. <i>amizade colorida</i> | lit. friendship colourful | 'non formal sexual relationship' |
| Pt. <i>peste negra</i> | lit. plague black | 'black death' |
| Pt. <i>lápiz azul</i> | lit. pencil blue | 'censorship' |
| Pt. <i>sorriso amarelo</i> | lit. smile yellow | 'forced laugh' |
| Cast. <i>pasar la noche en blanco</i> | | 'do not sleep' |
| Cast. <i>estar flipando en colores</i> | | 'amazing' |
| Eng. <i>to paint in dark colours</i> | | 'to portray negatively' |
| Eng. <i>to lent colour</i> | | 'to embellish' |

⁵ The toponymy has been adapted to *Bordéus*, which is never interpreted as a colour name.

Social stereotypes also include a wealth of common sense proposals on color symbolism, which may equally arise a feeling of identification or disagreement, as we may see, for instance, in the *International Color Symbolism* chart, that can be consulted at sockrotation.com/2017/02/19/international-colour-symbolism/.

In sum, assigning a colour name to a given 'mind or thought object' may result from the combination of some intangible universal features of human nature and cognitive, cultural and linguistic constraints such as the number of distinctions that a given language can effectively deal with and the kinds of relationships that hold between them.

Therefore, colour names may behave quite differently from language to language, or from language group to language group. This was the main motivation behind the development of the research reported in the following chapters, in the framework of Landlex.

Words for ‘red’ in Estonian

*Vilja Oja*¹

The article presents the names for the colour ‘red’ in Estonian monolingual dictionaries (EKSS; ÕS 2013), and their interpretation in various bilingual dictionaries, including historical dictionaries. The focus is on the Estonian generic terms (sections 2.–4.), but in addition some words having similar roots in other European languages will be discussed (section 5.). The lexicographic analyses include the structure of the words for ‘red’, etymology, naming motives and the semantic aspect as well as the distribution of some dialect words.

Up to the mid-19th century there were practically two literary languages used in Estonia, based on the main dialect groups²: North-Estonian (Ger. *revalsche* < Reval ‘Tallinn’) and South-Estonian (Ger. *dörptsche* < Dorpat ‘Tartu’) language. Both languages had their own generic name for red colour, ***punane*** in North-Estonian and ***verev*** in Estonian. Modern standard Estonian language has evolved mainly on the basis of the North-Estonian dialects.

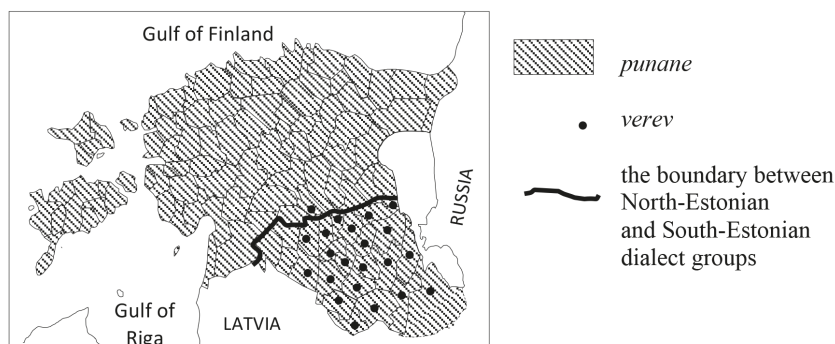
Contemporary dictionaries

In the Modern Standard Estonian dictionaries (EKSS; ÕS 2013) the basic generic term for ‘red’ is *punane*. However the adjective *verev* is given as synonym of *punane*, nowadays it is used mainly in literature and in some botanical terms

¹ Vilja Oja’s work has been partially supported by the European Regional Development Fund.

² see: www.eki.ee/murded/

(e.g. *verev kontpuu* ‘Winter Beauty, *Cornus sanguinea*’, *verev karikseen*, *Sarcoscypha austriaca*, in English known as the Scarlet Elfcup fungus), but in the South-Estonian dialects *verev* is the generic word for ‘red’ (see Map 1). The adjective *punane* is the derivative of the substantive *puna* ‘red colour’ with the common adjectival suffix *-ne* (GEN *-se*). The adjective *verev* (GEN *vereva*) is the derivative of the substantive *veri* (GEN *vere*) ‘blood’ with the suffix *-va*.



Map 1. Distribution of *punane* and *verev* in dialects

Both Estonian adjectives qualify for general reference to the red colour of any object or substance, for example colour of various red berries (rowan, cranberry, strawberry, etc.), flowers (rose, poppy, etc.), insects, birds and animals (ant, Lat. *Formica rubra* L., lady-bird, cow, etc.), wood (timber of alder tree), metal (copper, bog ore), clay and earth, and other natural objects, as well as painted or dyed materials and products (EKSS 4: 462–467; EKSS 6: 291–292). Both words are used also as names for some red or reddish objects, for example blood is said euphemistically *punane*, sometimes reddish brown domestic animals are called *punane*; in South-Estonian dialects the yolk is (*muna*) *verev* or *verev muna* (*muna* ‘egg’), a variety of potatoes is called *väike verev* (literally ‘small red’).

In all contemporary bilingual dictionaries the Estonian equivalent for a foreign generic name for the colour ‘red’ is the adjective *punane*, and the substantival unit *punane värv* ‘red colour’. Another Estonian equivalent for the substantive meaning ‘red’ is *puna*. For example, (1) in the bilingual dictionaries of Estonian and contact

languages: Latvian-Estonian *sarkans* ‘punane’ (LES: 577), Swedish-Estonian *röd* ‘punane’ (RES: 874), German-Estonian *rot* (adjective) ‘punane’, *Rot* (noun) ‘punane värv, puna’ (Kibbermann et al.: 994–995.), (2) in the dictionaries of Estonian and its cognate languages: Votic *kauniz* ‘punane’ (VKS: 418), Hungarian-Estonian *piros* ‘punane; punane värv’, *vörös* ‘punane’ (UES: 629, 846), (3) in dictionaries of other languages: Norwegian-Estonian *rød* ‘punane’ (Farbregd et al.: 303–676), French-Estonian *rouge* 1. (adjective) ‘punane’, 2. (noun) ‘punane värv’ (Kann 1995: 545).

In some dictionaries two Estonian equivalents, *punane* and *verev* are given. For example in the English-Estonian dictionary: *red* 1. (adjective) ‘punane, verev’, 2. (noun) ‘punane, puna’ (Silvet 2009: 995), Russian-Estonian *красный* [krasnyj] ‘punane, puna-, verev’ (VES 1: 607). Two different equivalents are also given in the Finnish-Estonian dictionary: *punainen* (adjective) ‘punane, verev’; *puna* (noun) ‘puna; punane värv’ (SES 1: 1233). In addition we can find the Estonian adjective *punane* as one of the equivalents for some secondary names for ‘red’, e.g. in the Latvian-Estonian dictionary Estonian equivalents for Latvian *ruds* and *rūsgans* [‘russet, red, reddish-brown’] are ‘punane, ruuge [light brown, dark yellow], ruske [russet, reddish brown], raudjas [irony, chestnut]’ (LES: 560).

Compound colour words and derivatives³

On the morphological level, partial hue content in a colour is usually expressed by means of the moderating suffixes *-kas* or *-kjas* (in dialects also *-kane*, *-kjane*) to the word stem in Estonian, e.g. *puna+kas*, *ver+kjas* ~ *ver+kjane* ‘reddish’. Different variants of red (as well as the other colours) can be expressed using compounds. The attributive components of the compounds enable to point out characteristic features of the colours, like tone (e.g. *kahvatu+punane* ‘pale red’, *hele+verev* ‘light red’), darkness (e.g. *tume+punane* ‘dark red’), brightness or intensity (e.g. *ere+punane* ‘bright red’, *särav+punane* ‘lustrous red’, *sügav+punane* ‘deep red’), and others. In order to denote a variety of red hues in more detail,

³ More about the structure of the colour names in Estonian and other Finnic languages see e.g. Oja (2001: 30–32, 61–88), or Oja (2007).

compounds based on comparison are used, for example *vaarika+punane* ‘raspberry-red’, *kirss+punane* or *kirsi+punane* ‘cherry-red’. If one describes a dyed wool or cloth, a compound can be formed using the colouring agent name, e.g. *madara|punane* (literally ‘bedstraw red’), which is a brownish or yellowish red colour of material dyed with the bedstraw (*Galium*) roots. Some nouns that appear as the first component of a compound have acquired the function of intensifying prefix. For example the common meaning of *tuli* is ‘fire’, but the compounds *tuli|punane* and *tuli|verev* mean usually ‘intense red, bright red’. The words for mixed hues of red and any other colour consist of two adjectives; the latter component expresses the predominant colour and the first element is a moderating colour adjective, e.g. *kollakas|punane* ‘yellowish red’, *lillakas|punane* ‘purplish red’.

The way to form colour names and to present characteristic features of colours is similar in many languages (compare equivalents e.g. in Herne 1958, Oksaar 1961, Koski 1983, Oja 2001, Kerttula 2002, Biggam 2007). Colour adjectives may be derivatives of nouns, like e.g. the Estonian *punane* and Finnish *punainen* < *puna*, Russian *красный* < *краса* (Vasmer 2: 367). In the Table 1 the structure of some Estonian colour names for ‘red’ are compared with Finnish, German, Russian and English equivalents⁴. In principle, derivatives and compounds with similar structure are used to denote various tones and hues of ‘red’ in these languages.

ESTONIAN	FINNISH	GERMAN	RUSSIAN	ENGLISH
<i>punane</i>	<i>punainen</i>	rot	красный	red
<i>punakas</i>	<i>punertava</i>	rötlich	красноватый	reddish
<i>tumepunane</i>	<i>tummanpunainen</i>	dunkelrot	темно-красный	dark red
<i>erepunane</i>	<i>kirkkaan punainen</i>	grellrot	ярко-красный	bright red
<i>kirsipunane</i> ~ <i>kirsspunane</i>	<i>kirsikanpunainen</i>	kirschrot	вишневый (красный)	cherry red
<i>pruunikaspunane</i> ~ <i>pruunjaspunane</i>	<i>ruskeanpunainen</i>	bräunlich rot	коричнево-красный	brownish red
<i>punakaspruun</i> <i>ruske</i>	<i>punaisenruskea</i>	rotbraun rötlich braun	красно-коричневый красный	reddish brown

Table 1. A comparative example of the structure of colour names for ‘red’ in different languages

⁴ The examples are taken from dictionaries (EVS, Kibbermann, et al., Saagpakk 1992, SES, Silvet 2009, VES) and from above referred studies.

In standard Estonian and in dialects colours are also expressed by compounds (or phrases) in which the final element is either a parameter word *värv* (*karv* etc.), meaning ‘colour’ (often in the partitive singular), or its adjectival derivative (*värviline*, *karvaline* etc.). The first component of the compound may be either a colour adjective, or a noun that indicates a coloured object. This was the primary system for naming colours that is still possible in all Finnic languages (Koski 1983: 336). Estonian compounds meaning ‘red’ are, for example: *punast väarvi* ~ *punase|värviline*, *verevat karva* ~ *vereva|karvaline*, ‘red’, *kirsi|karva* literally ‘cherry colour’. Often the colour adjective is attached to the compound containing a noun and the parameter word, e.g. *vase|karva punane* ‘copper-red’, *kirsi|karva punased* (~ *kirss|punased*) *huuled* ‘cherry red lips’.

Semantic variation

As we know, the semantic fields of colour words do not coincide in different languages. On this basis, the problem arises, how to provide adequate equivalents for colour terms in bilingual and multilingual dictionaries. In the above mentioned Latvian-Estonian dictionary, there are Estonian adjectives *punane*, *ruuge*, *ruske* and *raudjas* given as equivalents for the Latvian words *ruds* and *rūsgans*, but the semantic fields of the four Estonian words do not coincide (see section 2). On the base of the Standard Estonian, the word *verev* is sometimes interpreted as ‘blood-red’. The comparison of the equivalents for ‘red’ in several bilingual dictionaries, covering five languages, Estonian, Finnish, German, Russian, English, has resulted in a complex diagram of different words. For example the Estonian-Russian dictionary gives several words, including Rus. *красный* [krasnyj] and *алый* [alyj] as equivalents for the Estonian *punane* (EVS 3: 1121-1122), while in the Russian-Estonian dictionary Russian *алый* has been translated into Estonian also as *helepunane*, *erepunane* (VES 1: 146). In the Estonian-English dictionary we find the English colour names *bright red*, *scarlet* and *vermilion* as equivalents for the Estonian *helepunane* (Saagpakk 1992: 134). In the English-Estonian dictionary the translation of Eng. *scarlet* is Est. *sarlakpunane*, *helepunane* and the translation

of Eng. *vermilion* is Est. *kinaverpunane*, *helepunane* (Silvet 2009: 1028, 1315) (in more detail see e.g. Oja 2002: 255–256).

Historical lexicographic analysis

Estonians have had long-lasting historical, cultural and linguistic contacts not only with other Finnic nations but also with Germans. The oldest dictionaries including Estonian vocabulary are bilingual German-Estonian or Estonian-German dictionaries, compiled in the 17th, 18th and 19th centuries. Till the middle of the 19th century, German orthography was used for Estonian words in these dictionaries. The first concise Estonian monolingual dictionary was published in 1918 and the first exhaustive dictionary (EÕS) was published in three volumes in 1925 (I), 1930 (II) and 1937 (III). The Estonian word *punane* has appeared almost in all dictionaries (see Table 2).

Dictionary	Est. <i>punane</i> etc. – Ger. equivalent	Est. <i>verev</i> etc. – Ger. equivalent
Stahl 1637	punnane – roth	
Gutslaff 1648		werriw – roht
Göseken 1660	punnane – roth, röthe punnane warw – röthe	
Thor-Helle 1732	punnane – roth punnakas – röhlich tumme punnane – dunckel roth walwakas punnane – blaß roth elkias (~ elle) punnane – hochroth tulle punnane – feuerroth punnase-körb – braun-roth (Pferd)	
Hupel 1780	punnane – roth tumme (~ mustjas) punnane – dunckel roth walwakas punnane – blaß roth elkias (~ elle) punnane – hochroth punnase-körb – braun-roth (Pferd) punnakas – röhlich	werrew – roth tinnewerrew – röhlich helle werrew – hellroth tulli werrew – blutroth pimme werrew – dunkelroth walge werrew – blaß roth walsk werrew – hellroth werrew körb rothbraunes (Pferd)
Wiedemann 1869	punane – roth kollakas-punane – orangefarben, gelbroth mustjas-punane – schwarzroth tule-punane – feuerroth weri-punane – blutroth walkijas-punane – blassroth, rosa	werew ~ werrew – roth musta-werew – dunkelroth üli-werew – hochroth.

Table 2. Words for ‘red’ in historical German-Estonian and Estonian-German dictionaries

The first German-Estonian dictionary, compiled by Heinrich Stahl on the basis of the North-Estonian dialects, presents Estonian word *punnane* ‘red’, and the compound *punnane wasck*, meaning ‘(red) copper’ (Stahl 1637: 82, 101). The second German-Estonian dictionary, compiled by Johannes Gutsclaff on the basis of the South-Estonian dialects, presents Estonian *werriw* as colour name for ‘red’ (Gutsclaff 1648: 232). The third German-Estonian dictionary contains more Estonian material, including a noun and verb phrases, e.g. Ger. *roth, röthe* – Est. *punnane*, Ger. *röthe* – Est. *punnane warw*; Ger. *roth werden* – Est. *punnaseks sahma ~ punnasel karwal heitma* (Göseken 1660: 341).

The first Estonian-German dictionary, compiled mainly by Anton Thor-Helle on the basis of the North Estonian vocabulary, was published in the 18th century. This dictionary gives, besides the basic term *punane*, the derivative Est. *punnakas* – Ger. *röthlich*, compounds denoting dark, light and bright shades of red: Est. *tumme punnane* – Ger. *dunckel roth*, Est. *walwakas punnane* – Ger. *blaß roth*, Est. *elkias punnane ~ elle punnane* – Ger. *hochroth*, comparative-based compounds: Est. *tulle punnane* Ger. *feuerroth*, Est. *tulle karwane* – Ger. *Abendroth, feuerroth*, and a compound for the mixed hue of red: Est. *punnase-körb* – Ger. *braun-roth (Pferd)*, as well as verbs for ‘turn red’: Est. *punnaseks löma* – Ger. *erröthen*, Est. *punnama* – Ger. *roth seyn, roth werden*, Est. *ärrapunnastama* – Ger. *roth werden* (Thor-Helle 1732: 164, 192).

August Wilhelm Hupel’s dictionary, published in 1780 contains two parts: Estonian-German and German-Estonian. The dictionary includes vocabulary of both Estonian languages (North-Estonian and South-Estonian). Here some compounds with *verev* were first presented (see Table 2) and illustrated with examples: S-Est. *werrew kriit* – Ger. *Rötelstein, rothe Kreide*, S-Est. *werrew raag* – Ger. *Rothbüchen*, S-Est. *werrewa sittiko marja* – Ger. *Johannisbeeren*, as well as verbs: Est. *werretama, werrewas jäma* – Ger. *erröthen* (Hupel 1780: 310). Second, revised and enlarged edition of the dictionary (Hupel 1818) gives some more examples of the words’ use. Truly abundant vocabulary of the Estonian literary language and dialects was presented in the Estonian-German dictionary by Ferdinand Johann Wiedemann

(first edition 1869). By this time, the Estonian language was already developing its own orthography, replacing the old German tradition.

The form and structure as well as meanings of the word *punane* and its compounds in the historical monolingual dictionary of Standard Estonian (EÕS: 856–859) are similar to the Modern Estonian. Mainly the same system is used in the Estonian normative dictionaries published in the second half of the 20th century and nowadays, including ÕS 2013. The entry *punane* in EÕS contains also many plant and animal names and other terms. The adjective *verev* is presented in the entry of the noun *veri* together with other derivatives, like *verekarva* ‘blood-colour’ *veretama* ‘look red’. The meaning of the word *verev* is defined as ‘red’ and ‘blood-red’ (EÕS: 1656 –1657).

Etymological analysis

Both of the Estonian colour terms, *punane* and *verev* have indigenous roots. Historically the noun *puna* of Finno-Ugric origin had primary meaning ‘animal hair, wool’. The colour-denoting function of the word gradually advanced in the Proto-Finnic period. First the compound *puna karva* ‘colour of animal hair’ was used, then during a period the noun *puna* acquired the adjectival form and meaning: *punase* (~ *punast*) *karva* ‘of red colour’. Later the meaning of the Baltic loan *karva* ‘colour; hair’ become narrower, the word began to denote only ‘hair’, and the adjective *punane* came to dominate for ‘red’ (Saareste 1924: 266; SKES: 640–641; SSA 2: 426–427; UEW: 402). Words with the stem *puna-* for ‘red’ are common only in Finnic languages: Finnish *punainen*, Karelian *punaine*, Izhorian *pun(n)ain*, Votic *puna*, *punanõ* and Livonian *pu’nni* (see about the distribution, e.g. ALFE 2: 275; Oja 2001: 42–43). In the other Finno-Ugric languages words with the respective stem have retained the former meaning ‘animal hair, wool’, but Erzya-Mordvin *pona* has parallel meaning ‘colour’ and North-Khanty *pun* has parallel meaning ‘colour of hair’.

In South-Estonian dialects *verev* has certainly served as the basic term for ‘red’, although the term *punane* is used in parallel there (Map 1). It is believed,

that the word *verev* is a derivative of the Estonian noun *veri* ‘blood’, which is used in the adjective function. The noun *veri* is a common word for ‘blood’ in most Finnic languages: besides Estonian also in Finnish, Karelian, Ingrian, Votic, Livonian, and in some Vepsian dialects. Word variants of the root *ver-/vir-* have similar meanings even in more distant cognates, and their area of distribution cover most of the Finno-Ugric languages (SKES: 1704–1705; EEW: 3794–3795, 3797; UEW 1988: 576; SSA 3: 427; EES: 598–599).

The colour word *verev* is considered an indigenous South Estonian derivative, because similar colour names are missing in the other Finnic languages⁵. In addition, in South-Estonian dialects we find verbs and adverbs with the stem *veri-/vere-*, associated with colour, (not only ‘blood’), for example *taevas veretab* ‘the sky has turned red’ (EMSUKA). In the other Uralic languages, the Mansi dialect word *wiyr* (~ *wür*) is used to denote both, blood and the red colour (SKES 1705; Koski 1983: 80; SSA 3: 427). Hungarian *vörös*, dial. *veres* ‘red’ (< *vér* ‘blood’) is analogous to South-Estonian *verev*, but most probably the Hungarian and Estonian words were formed separately (Saareste 1924: 266). On the other hand, it has even been suggested that a word with the root *ver-/vir-* has been the original name for ‘red’ in the Uralic language family (Sutrop, 2002: 167). As we know, the concepts ‘blood’ and ‘red’ are indicated by the same or similar word in many languages (see e.g. Biggam 2014: 14 a.o.).

Some secondary words for ‘red’

In addition to the words discussed above, some other colour adjectives are used to denote red or reddish colour in Estonian. For example, *ruske*, *raudjas*, *tõmmu* and *lepp* or *lepu* denote especially animal hair colour, but the use of *ruske* is much wider. The word *rebu* has become the term for ‘yolk’ in Standard Estonian

⁵ Sometimes reddish colour is expressed also in North-Estonian dialects by the word *verev*, in Finnish *verevä*, and in Karelian dialects *vereväine* (Lude dialect) or *verehiine* (Olonec dialect), but those words seem to be more recent derivatives of the noun *veri* ‘blood’, referring to the meaning ‘sanguineous’ rather (Oja 2006: 374).

and North-Estonian dialects (in more detail see Oja 2016), but its primary meaning was ‘fox’ in Finnic (see e.g. EES: 422). In some dialects of Estonian the colour words *ruske*, *raudjas*, *tõmmu* and *rebu* are used to denote brownish-red hues, in some other dialects *rebu* or *ruske* denotes yellowish red hues synonymously with the word *lepp/lepu* (see 5.1–5.3).

Colour words, based on a strange colouring agent, on a place name or gemstones’ designation are younger loanwords in Estonian. Many of them are phonetically similar to their German equivalents, e.g., Est. *purpur* – Ger. *Purpur* (Lat. *purpura* < Gr. – EEW 2241), Est. *rubiin*, *rubiinpunane* – Ger. *Rubin*, *rubinrot*, *rubinfarbig* (Lat *ruber* < *rubinus*), and others. Often loanwords have been adapted to fit the Estonian phonetic and lexical system, e.g., *rubiin*. Their use may not reveal whether it was the colour-denoting adjective that was originally borrowed, or a noun (denoting a base of comparison or a pigment name) that has come into adjectival use later. Like other colour terms, the loans also include some words, used as nouns and adjectives, e.g. Est. *purpur* ‘red cloth; deep red (sometimes purplish)’. Some unknown foreign terms have got quite strange word stem on the paronymic basis (by folk-etymological misinterpretation), e.g., Est. *bordoopunane* ‘bordeaux red’ (Ger. *bordeauxrot* < Fr. Bordeaux) has been used in dialect speech as *pordu|punane* ‘brothel-red’. Below the use of four Indo-European loanwords in Estonian, *ruske*, *raudjas*, *rebu* and *purpur*, and their presentation in dictionaries will be analysed.

RUSKE

According to the Modern Estonian dictionaries (EKSS, ÕS 2013), the adjective *ruske* denotes reddish brown and brownish red hues. It is often used to describe the colour of animal hair, but also other objects, for example the coagulated blood, rowan berries, sunset, sunburnt human skin, etc. Similarly to the basic colour terms, *ruske* appears as one component in many compounds, like *hele|ruske* (*hele*- ‘light’), *rebase|ruske* (*rebase*- ‘fox’), *kollakas|ruske* (*kollakas*- ‘yellowish’), *puna|ruske* (*puna*- ‘red’), *tuli|ruske* (*tuli*- ‘fire’), and others. In addition, some

regular derivatives are used, like moderative adjective *ruskjas*, verbs *ruskama* and *ruskuma* ‘make or become russet in color’ (EKSS 4: 898; ÕS 2013: 798).

In historical dictionaries the word was first presented in the 18th century: Est. *rusk* – Ger. *braun roth*, Est. *ruskjad* – Ger. *Brand-gelb, braun-roth* (Thor-Helle 1732: 171), and Est. *rusk, ruskjad* – Ger. *brandgelb, braunroth* (Hupel 1780: 261). Wiedemann’s Estonian-German dictionary (1869: 1091) gives the Estonian adjectives *ruske, ruskjas* and *rusmine* with the German equivalents *brandgelb, braunroth, gelbroth*, Estonian verb *ruskama* – Ger. *brandgelb, gelbroth, braunroth sein* with the example: Est. *taewas ruskab* – Ger. *der Himmel ist gelbroth*, and the Estonian noun *rusklane* – Ger. *kleine, rothe Ameise* ‘kind of small red ants’. (*Formica rubra L.*). In addition of the above mentioned words the Estonian monolingual dictionary, published in 1937, includes various biological and some chemical terms with the *rusk-* or *rus-*stem (EÕS: 1172).

Words with the stem *rusk-* are used in all Finnic languages except Livonian, but they do not express the same colour. Vepsian *rusked* (GEN *rusttan*) and Karelian *ruskie, ruškie, ruški(a), ruskei* or *rusked* are the generic terms for ‘red’, but the Karelian words mean also ‘brownish red’ and ‘beautiful’, while in some Vepsian dialects *rusked* means ‘beautiful’ and ‘good’. Semantics of the Karelian and Vepsian words may be partly influenced by Russian *красный* [krasnyj] ‘red; beautiful’ (cf. Herne 1954: 51–53). Votic *ruskōa* designates ‘dark reddish brown’, in some dialects ‘yellowish red’, while Standard Finnish *ruskea* and Ingrian *ruskia* are common terms for ‘brown’. In addition *rus-*stemmed words are used in Finnic to describe reddish colour, for example, Finnish *rusa, rusahka, rusakka, rusama, rusappa, rusettaa, ruseva, ruso, rusoinen*, and the verbs *rusehtua, rusottaa* (Koski 1983, 93–94). The original meaning of the words with *rus(k)-*stem was probably wider, maybe ‘red + yellow (+ brown)’ (Koski 1983: 94–98; Oja 2014: 95–97). The Indo-European root was obviously borrowed into Proto-Finnic, but the donor language is not clear. The Indo-European words for ‘red’, like Eng. *red*, Ger. *rot*, Rus. *красный* and others, descend from the reconstructed Proto-Indo-European root **h₁reudh-*, and it is believed that historically the words descended from the root expressed an extensive colour category, including intersections of red, yellow,

brown and purple (Biggam 2012: 171, 2014: 14–15). Principally the Finnic stem is considered to be a Baltic loan, cf. Lithuanian *rusvas* ‘brownish, ruddy’, *rudskis* ‘(reddish) brown’, *rūdas* ‘brown’, and Latvian *ruds* ‘brownish red, red’ ~ *rūsgans* ‘reddish, reddish-brown’ (SKES: 881–882; SSA 3: 110–111; EES: 439; LES: 560).

RAUDJAS

The Estonian word *raudjas* (GEN *raudja*) is synonymous with the adjective *punakaspruun* ‘reddish brown’ and the noun *punakaspruun hobune* ‘reddish brown horse’. The colour hue has been defined also as chestnut, rusty, irony or liver-colour and described as similar to *ruske* or a little bit of darker (EKSS 4: 746–747; ÕS 2013: 767). In the 18th century dictionaries, this word is presented in two forms: Est. *raudjas tõmmu* – Ger. *Schweiss-Fuchs* (Thor-Helle 1732: 167), and S-Est. *raudjas*, N-Est. *raudjas tõmmu* – Ger. *Schweiss-Fuchs* (Hupel 1780: 255). In the 19th century Wiedemann’s dictionary, there are words *raudjas* and *tõmmu* as synonyms with German translation *Schweissfuchs* (1869: 1028). In addition, the derivatives of the stem *rautsik* ~ *raudsik* and *raudlane* – Ger. *kleine rothe Ameise* (*Formica rubra* L.) are given by Hupel and Wiedemann. In the historical monolingual dictionary (EÕS) we can find *raudjas* in the entries of *punakas* and *raudjas*, where the colour meaning is defined as brownish red, reddish brown and dark brown (EÕS: 856–859, 1041).

Words with *raud*-stem denote ‘reddish brown colour’ and ‘reddish brown, chestnut or dark brown horse’ also in some other Finnic languages, e.g. Finnish *rauti(as)*, *raudikko*, etc., and Karelian *rauvikko*, etc. The stem word, Estonian *raud* (GEN *raua*), Finnish *rauta*, etc., meaning ‘iron; bog ore’, is a Germanic or Proto-Scandinavian loan in Proto-Finnic (cf. e.g. Norwegian *raud* ‘red’), or a Baltic loan, cf. Lithuanian *raudà* ‘red colour’ (SSA 3: 57; EES 420–421). The colour term Est. *raudjas*, Fin, *raudikko*, etc., referring to a chestnut horse, is probably a separate loan from Baltic languages, cf. Lithuanian *raudónas* ‘red’, and Latvian *raūds*, *raūdis* ‘reddish brown’ (Oja 2014: 97–98).

LĒPU

In the Standard Estonian dictionaries, the colour word *lepp* (GEN *lepu*) is declared to be a dialect word. Its meaning is defined as the colour of alder bark, brownish or reddish grey, and a horse of this colour (EKSS 3: 103, ÕS 2013: 469). Comparing the use of the word in dialect speech, it seems that the meaning has changed. The words *lepp* and *lepu* denote reddish colour or a reddish-yellow horse in Estonian Insular dialect (EMS V: 111). Secondly, the noun *lepp* (GEN *lepa*) means '(fish or animal) blood' on the North Estonian and West Estonian coast and islands, as well as *lieppa* in Livonian and *leppä* in Finnish and Karelian dialects (see Oja 2006). Thirdly, names for the alder tree (*Alnus*) have the stem *lep(p)-* in all Finnic languages, in Saami and in Mordvin (EES: 237).

Old historical dictionaries present the Estonian nouns: *leppa lind* 'a bird having red breast' (Thor Helle 1732: 130); tree name: *lepp* 'alder', compound terms for reddish birds and beetles: *leppa lind*, also 'ladybird' (Hupel 1780: 203). In Wiedemann's dictionary the three different concepts: 'tree name', 'blood' and 'reddish animals', are presented in separate entries: (1) Est. *lepp* GEN *lepa* – Ger. *Erle, Eller (Alnus Tournef.)*; (2) Est. *lepp* GEN *lepa, lepu* – Ger. *Blut (ausgeflossenes, bes. von Thieren), Blutwasser*; (3) Est. *lepp* GEN *lepu* (in Estonian Western regions and in N-Eastern coast) – Ger. *Fuchs, rothes Pferd*, and compounds Est. *tumelepp* – Ger. *Schweissfuchs*, Est. *lina-laka-lepp, wal'kija-laka-lepp* – Ger. *Goldfuchs mit weisser Mähne* (In more detail see Wiedemann 1869: 539).

The etymology of the stem is uncertain: is it a Baltic loan from **leipā*, or descendant of Proto-Indo-European or a later Indo-European loan, or is it originally a Finno-Ugric stem (SKES: 288; UEW: 689; SSA 2: 64–65; EES: 237). The original meaning of the word has been debated, whether it is blood or the tree. Studies on the dialect vocabulary of Estonian and cognate languages have shown that the primary meaning of the noun might have been a colouring substance, a pigment used in a paint (see Oja 2014: 98–101). A parallel development has been described, analysing cognates of PIE **h₁elu-*, defined as colour adjectives for reddish, yellowish and brownish hues as well as tree-names, mammal-names and bird-names, and it is believed that the colour sense was the earliest (Biggam 2012: 185–192).

PURPUR

The Modern Estonian dictionaries define the colour adjective *purpur*, *purpurne* (with adjective suffix *-ne*) or *purpuri karva* (~ *-karvaline*, *-värvi*, *-värviline* ‘colour’) as ‘purple’ or ‘purple-red’ (EKSS; ÕS 2013). The adjectives are used to describe many reddish objects, for example, sunset is described as *purpurne*, reddish leaves in the autumn, purple or red blossoms of some plants, reddish mushrooms, the purplish colour of textiles, especially the coat of a high person (like cardinal or king), the reddish human skin colour, etc. In addition numerous compounds are presented, like nouns *purpur|riie* (*riie* ‘cloth’), *purpur|rüü* (*rüü* ‘robe’), *purpur|tigu* ‘purpura’, *purpur|haigur* (*haigur* ‘heron’, Lat. *Ardea purpurea*), and adjectives *purpur|punane*, *purpur|lilla* (*lilla* ‘purple’), *purpur|roosa* (*roosa* ‘pink’), *purpur|sinine* (*sinine* ‘blue’), and others (EKSS 4: 484; ÕS 2013: 727).

In the historical Göseken’s German-Estonian dictionary the equivalent for the German noun *Purpur* is Est. *kallis punnane kallewe* ‘expensive red woollen fabric’, and the German adjective *purpurroht* has been translated as *purpur* (*karwalinne*) *punnane* ‘purple-red’ (Göseken 1660: 327). The Estonian-German dictionaries by Hupel and Wiedemann give only the nouns: Est. *purpur* GEN *purpuri* – Ger. *Purpur* (Hupel 1780: 250; Wiedemann 1869: 990). In the historical monolingual dictionary of Estonian (EÕS) the word *purpur* is defined as *helepunane värv* ‘bright red colour’. The adjectives are derivatives with adjective suffixes, like *purpur(i)-ne*, *purpuri-line*, *purpur-jas* (‘reddish’) and compounds *purpuri|karva*, *purpuri|värviline*, *purpur|punane* and *purpur|sinine* (*sinine* ‘blue’). Among the nouns there are several scientific terms of biology, chemistry and medicine, e.g., *purpuriin* ‘purpurin; red pigment’, *purpur|hape* ‘purpuric acid’, *purpur-lane* ~ *purpur|tigu* ‘purpura’, *purpur|kana* ‘swamphen (Lat. *Porphyrio*)’ (EÕS: 865–866).

In Estonian dialects, *purpur* (GEN *purpuri*) has been used (1) as colour word to denote a beautiful ‘bright red, scarlet, vermilion’, and (2) for bright red cloth. Mostly *purpur-* or *purpuri-* is one component of compounds. For example: *purpur(i)|punane* (S-Est. *purpur(i)|verev*), *punane purpur*, *purpur(i)|riie*, S-Est *purpur(i)|rõivass* (*riie*, *rõivass* ‘cloth’), sometimes *punane purpuri rõõvass* ‘bright red cloth’, and others. The word variants *pulpur*, *purpulli* or *pulpoori*,

recorded in dialect speech (EMSUKA), show that the word was quite strange for the informants. For that reason, it is missing in the Concise Dialect Dictionary (VMS), like other young loanwords.

Summary and outlook

The most widespread word for 'red' in Estonian is *punane*. In South-Estonian dialects the adjective *verev* is synonymous with *punane*. In contemporary bilingual dictionaries the Estonian equivalent of a basic term for 'red' is Est. *punane*, or two words *punane* and *verev*. Historical German-Estonian and Estonian-German dictionaries from the 17th century till the mid of 18th century were drawn up on the basis of North-Estonian or South-Estonian vocabulary, and the Estonian equivalent to the German *rot* was or (N-Est.) *punane* or (S-Est.) *verev* there. Later the vocabulary of both dialect groups has been presented.

Both Estonian words are derivatives from nouns with indigenous background: *punane* < *puna*, historically 'animal hair; wool' and *verev* < *veri* 'blood'. Etymologically, words for animal hair and wool in other Finno-Ugric languages have the same origin as the Estonian word *puna*, but nouns and adjectives with the stem *puna*, meaning 'red' are used only in Finnic languages. The South-Estonian adjective *verev* has not similar terms for 'red' in close cognate languages, but there are analogic derivatives in distant related languages. The Estonian system of colour-denoting compounds is an open one: according to the principle of analogy, new units are constantly being produced. Therefore the final number of words for 'red' is impossible to determine. Principally the same system occurs in the cognate languages and in contact languages of Estonian, especially in German. On the one hand, the Estonian and Finnish colour naming systems could have been influenced by Germanic languages. On the other hand, a roughly similar system is used more extensively, e.g. in Russian (see Table 2). Many languages use compounds of similar structure to denote lightness-darkness and intensity of colours. Intersections or mixture composite colour categories that are unions of two colours, are denoted by the combination of two basic colour terms (in

more detail see e.g. Bornstein 2007). To the periphery of the extension of the semantic field of the generic word for 'red' (as well as other basic colour terms) is usually referred by moderating derivatives. The way of defining a colour hue more precisely by comparison-based compound is also popular in different languages.

Some words, used to denote reddish colour in Estonian (e.g. *purpur*, *raudjas*, *rebu*, *ruske*) are loans from Indo-European languages. The meanings of these words may vary. Sometimes the meaning of a borrowed colour name does not coincide with its original semantic background. For example, the word *purpur* 'purple-red, crimson' has been mediated into Finnic languages by the Bible, but in Estonian dialects *purpur* (or its phonetic variant) is used for bright red colour and bright red cloth. It is undoubtedly clear, that the semantic fields of words for 'red' do not coincide in different languages. The comparison of the vocabulary helps to avoid misunderstandings in communication as well as mistakes in translation programmes. On the other hand it would be interesting to compare the word uses in European languages in which the words for 'red' might have similar naming motives (e.g. 'blood', 'bog ore').

Modern Greek equivalents of ‘red’

Simeon Tsolakidis

The present paper is a contribution to the study of the Modern Greek (MG) vocabulary and lexicography especially in relation to the words meaning ‘red’ and how these words appear in the entries of MG dictionaries. Our data comes from: 1) modern lexicographical resources and particularly the online editions of: [DSMG]¹, [Kriaras]², [GOD] and [Georgacas], and 2) the hard copy editions of [Du Cange], [Somavera], [Skarlatos], [Dimitrakos], [Babiniotis] and [DCG].

In the first part of this paper I will comparatively present the data, i.e. the entries for ‘red’ for every single MG term for ‘red’, in the above mentioned dictionaries and we will conclude with some comments about the way the MG terms for ‘red’ are presented in dictionaries of Medieval and Modern Greek.

The MG terms for ‘red’ in major dictionaries for MG

The basic MG word is κόκκινος [ˈkocinos] and it goes back to Ancient Greek (AG) κόκκος [ˈkok:os] ‘grain, seed (as of the pomegranate)’ (maybe related with a Mediterranean root *cosco-, cf. Portuguese *cosco*, Spanish *cuesco* ‘kernel’ (Frisk 1960: 895), which in Hellenistic Greek (HelG) had developed the meaning ‘berry’ (gall) of kermes oak, used to dye in scarlet colour’. However, it is interesting that

¹ www.greek-language.gr/greekLang/modern_greek/tools/lexica/triantafyllides/index.html

² www.greek-language.gr/greekLang/medieval_greek/kriaras/index.html

DMVG is particularly important for Early MG since except from the Vulgar Medieval Greek of the period from 1100-1453, it provides us with a vast amount of lexical data from the Early MG until 1669.

the earliest attestation of [ˈkoc:inos] (possibly in the period between 320 and 290 BC), has to do with blushing and not with ‘scarlet’ as a means for dying. Particularly, in Menander’s comedy *The Sikyonians* vv. 48-50 we read *οὕτω καὶ τὰ πολλὰ ἀκήκοα τούτου λέγοντος ἄρτι προς τὸν δεσπότην·ὁ δε κόκκινος γενόμενος ὑπανεδύετο* [ˈhouto:cai ta poˈla aˈce:koa ˈtoutou ˈleyondos ˈarti pros ton deˈspot:en. ho de ˈkok:inos geˈnomenos hupaneˈdueto] ‘It was the same with everything I heard him saying to his master just now. He (the master) turned scarlet and tried to sneak out of it’. In this passage [ˈkocinos] could mean either ‘scarlet’ or ‘deep red’ and maybe in contexts like this the transition from the meaning ‘scarlet’ to the meaning ‘red’ took place. Besides, we could assume that, at least from the end of 4th century BC [ˈkocinos] was denoting not just the ‘scarlet’ as a hue of red color, but also the ‘red’ itself. In any case, the meaning ‘scarlet(-dyed)’ is very persistent at least until the middle of the 3rd century AC, when in cases such as *λωδίκιον κόκκινον πρωτόγναφον* [loˈdicion ˈkocinon proˈtoɣnafon] ‘blanket, red, once-carded’ (P. Michael 18, fr. 4.5), it is not easy to decide if [ˈkocinos] means ‘red’ or something not as strong as scarlet. We could assume that in cases such as the above, the transition between ‘scarlet’ and ‘red’ took place. The non promulgation of [kocino-], at least in certain domains of literature is indicated by the fact that there is no KOKKINOS entry in Lampe’s *Patristic Greek Lexikon* (with data from the works of Christian authors from 1st to 8th century). On the other hand the word is present in [Kriaras] in attestations both from Medieval Greek (for example in a text of the 12th century a *κόκκινομετάξι* [ˈkocino meˈtaxi] ‘red silk cloth’ is mentioned) and Early MG, for example in a text of late 15th century *άθη κόκκινα* [ˈaθi ˈkocina] ‘red flowers’ is mentioned. The entry KOKKINOS in [Kriaras] is the following:

κόκκινος, επίθ. [list of attestations]

Το αρχ. επίθ. *κόκκινος*. Η λ. και σήμ.

Κόκκινος³: [examples of use in Medieval and Modern Greek literature]. – Η λ. *σετοπων. μεταουσ. νησί, φανάρι*: Πορτολ. Α 233⁷, 251⁹.

³ Henceforth the entry definitions which we will present and comment will be underlined.

Here we notice that in the entry definition only the meaning ‘red’ appears and there is no reference to other colors or hues of red. Already since the 12th century ΚΟΚΚΙΝΟΣ is the basic word for denoting ‘red’ in Common Greek language. In the etymological part we are informed that the word keeps being used ‘nowadays’ (*Η λ. και σήμ.*) and that it goes back to AG [‘koc:inos]. Actually, [Kriaras] is the only dictionary mentioning that the predecessor of MG [‘kocinos] is an AG word and not a HelG one, probably taking into account that, as we have already mentioned, the word is attested in a comedy written in a transition period between Ancient Greek and Hellenistic Greek⁴.

In [Somavera] we find two entries for ΚΟΚΚΙΝΟΣ ‘red’, one for the adjective ‘red’ and one for the noun ‘red (color)’, and they are:

τὸ Κόκκινον. *Il rosso.*

Κόκκινος, η, ον. *Rosso.*

Actually, [Somavera] seems to be the first lexicographer of MG that provides the dictionary attestation that [‘kocino] could be either an adjective or a noun. This does not hold true in the case of [Skarlatos], where ΚΟΚΚΙΝΟΣ appears only as an adjective in the following entry:

⁴ The history of the Greek Language begins, as far as the surviving texts are concerned, with the Mycenaean texts written in Linear B. This stage ends at about 1200 BC with the collapse of the Mycenaean civilization. The period of Ancient Greek, where the works of Homer, Plato, Aristotle etc. were written, ends at about 300 BC. It is followed by the Hellenistic period (where the works of Plutarch, Polybius etc. were written and the Greek translation of the Old Testament (by Septuaginta) was compiled). The Hellenistic period started just after Alexander the Great’s conquests, that spread the Greek around the Mediterranean Sea and far into the Orient. Hellenistic Greek was the basis for the development of Medieval and Modern Greek, since a very large number of characteristics of Medieval and Modern Greek (concerning, for example, the pronunciation) are already present in Hellenistic Greek. Medieval Greek period (the Greek of the Byzantine era) lasts from the 4th century AC until the middle of the 15th century (when the Byzantine Empire stops existing after the capture of Constantinople (present day Istanbul) by the Ottomans in 1453). That is considered to be the point when the Modern Greek period begins.

ΚΟΚΚΙΝΟΣ, η, ον. » ἐρυθρός, ερυθροβαφής, φοινικοῦς, φοινικοβαφής, πορφυροῦς, κόκκινος, κοκκοβαφής καὶ κοκκινοβαφής (κυρ. ὁ βαμμένος με πρινοκόκκι), ἀλουργός *rouge* || . κόκκινος βαθύς ('σάν τῆς ῥωδιᾶς το ἄνθος, Τουρκ. Νάρ-τσιτσεϊ, ἢ Ἄλικος). » Ὑσγινοσ, ὑσγινοβαφής, φλογοειδής, φλόγινοσ, φλογόχρουσ, φλόγεοσ, πουρρόσ, *éclarate, ponceau*. || . κόκκινος ἀνοικτόσ. ἴδ. τριανταφυλλένιοσ. || . ἔχει κόκκινα μάγουλα » Ἐπανθεῖ αὐτῶ κατὰ τὰσ παρεῖασ ἐρύθημα.
§.(συνεκδοχ.) κόκκινος ἄνθρωποσ ὁ ἔχων κόκκιναισ τρίχαισ). » Πυρρόσ, πυρρόθριξ-ότριχοσ (Ἀριστοτ.), *roux,rousseau*.

[Skarlatos] is actually a dictionary providing for every MG headword equivalents from AG and HelG as well as from French. From what we are provided with about ΚΟΚΚΙΝΟΣ it seems that in the 19th century ['kocinos] is the cover term for red and every hue of red, since, for example, we read that ['kocinos] could be either *κόκκινος βαθύς* ['kocinos va'this] 'deep red' or *κόκκινος ανοιχτός* ['kocinos ani'xtos] 'light red', while as French equivalents for ['kocinos] *rouge, éclarate* and *ponceau* are mentioned.

In Dimitrakos, a dictionary compiled in the first half of 20th century the entry for ΚΟΚΚΙΝΟΣ is the following:

κόκκινος-ίνη-ον μτγν., μσν. κ. -οσ-ον, νεώτ., δημ. -ινη-ο ὁ ἐρυθροβαφής, πορφυροῦς [examples of use in Hellenistic, Medieval and Modern Greek literature] 2) ἐπὶ προσ. ὁ ἔχων χρώμα, χροῖαν τοῦ προσώπου ἐρυθρωπήν [examples of use in HelG and MG] || ὁμ. ἐπὶ φαινομένων ἢ πραγμ., ὁ ἔχων χρώμα πορφυροῦν, ἐρυθρόν [examples of use in MG] 3) μτγν. τὸ οὐδ. κτ. πληθ. ὡσ οὐσ. τὰ φορέματα [examples of use in Hellenistic Greek literature] 4) δημ. τὸ οὐδ. ὡσ οὐσ. τὸ ἐρυθρόν, πορφυροῦν χρώμα [examples of use in MG]

From the above entry we are informed that ['kocinos] meant the *red-dyed* already in HelG, and that in the same period it was also used as a noun denoting the red color, as it happens in the vernacular CMG of the mid 20th century (when Dimitrakos was compiled)⁵. Besides, Dimitrakos provides *ερυθρός* [eri'thos] and *πορφυρούς* [porfi'rus] as equivalents of ['kocinos]. We will refer to the case of [eri'thos] as an actually exact equivalent of ['kocinos] in the next chapter, while in the relevant entry for [porfi'rus] it is just mentioned that we have to do with

⁵ In Dimitrakos the abbreviation *δημ.* (=Δημοτική, Demotic Greek) is used for words belonging to the vernacular CMG of its era.

an equivalent of an AG or HelG word (πορφύρεος [por'p^hureos]/[por'fyreos]) meaning, amongst others, 'deep red', but in no case just 'red'.

In case of [DSMG] the entry for ΚΟΚΚΙΝΟΣ is the following:

κόκκινος -η -ο [kókinos] Ε5: **1α.** που έχει το χρώμα του αίματος: Ένα κόκκινο τριαντάφυλλο. Κόκκινα μήλα. Κόκκινο μελάνι. Τα κόκκινα αυγά του Πάσχα. Φορούσε ένα κόκκινο φόρεμα. Οι διορθώσεις να γίνουν με κόκκινο μολύβι. Ο ήλιος ~ έγερνε προς τη δύση. Το κόκκινο φως της τροχιάς, το απαγορευτικό σήμα στους φωτεινούς σηματοδότες και ως ουσ. το κόκκινο: Πέρασε με κόκκινο. Η κόκκινη σημαία, ως σύμβολο της κομμουνιστικής επανάστασης. Κόκκινη κάρτα*. || Κόκκινα κρέατα, τα μοσχαρίσια, βοδινά, σε αντιδιαστολή προς τα άσπρα. (έκφρ.) κόκκινη κλωστή δεμένη, στην ανέμη τυλιγμένη, δώσ'της κλότσο* να γυρίσει, παραμύθι ν' αρχινίσει. στρώνω σε κπ. κόκκινο χαλί* (για να περάσει). ΦΡ κόκκινο πανί, για κτ. που προκαλεί το θυμό ή την οργή κάποιου, ό,τι τον διεγείρει. κόκκινη/θερμή γραμμή, για άμεση ή επείγουσα επικοινωνία ανάμεσα στις κυβερνήσεις δύο χωρών [...]. **2.** για το δέρμα που παίρνει ένα κοκκινωπό χρώμα λόγω της συσσώρευσης αίματος: Κόκκινα μάγουλα. Κόκκινα αυτιά. Κόκκινη μύτη. Έχει το κόκκινο χρώμα της υγείας. || Γιατί είσαι τόσο ~; Μήπως έχεις πυρετό; Έγινε ~ από το θυμό του / την ντροπή του. Έγινε ~ σαν παντζάρι. (έκφρ.) γίνομαι~ σαν παπαρούνα*. ~ σαν αστακός*. **3.** που από πυράκτωση έχει πάρει κόκκινο χρώμα: Τα κάρβουνα έγιναν κόκκινα. || (ως ουσ.) το κόκκινο: α. το κόκκινο χρώμα: Σκούρο/ανοιχτό κόκκινο. Κόκκινο της φωτιάς, πολύ έντονο. Σε όλες τις αποχρώσεις του κόκκινου. β. (πληθ.) ρούχα με κόκκινο χρώμα: Ηρθε ντυμένη στα κόκκινα. ΦΡ φωτιά στα κόκκινα!, ως πείραγμα, με θαυμασμό για όμορφη γυναίκα ντυμένη στα κόκκινα. [ελνστ. κόκκινος < κόκκος βελανίδι βαφής']

From the above entry we get the information that MG ['kocinos] carries either the meaning 'red' or 'reddish', and that it goes back to HelG ['kocinos] that comes from ['kokos] 'acorn used for coloring'. Besides, there is no indication that ['kocinos] is a word of learned origin⁶. The same holds true in the case of [DCG], where the entry for ΚΟΚΚΙΝΟΣ is the following:

κόκκινος, η, ο κόκ-κι-νος επίθ. **1.** που έχει το χρώμα του αίματος ή κάποια απόχρωσή του [examples of use in MG] Ουσ.: **κόκκινο** (το) **1.** το αντίστοιχο χρώμα [examples of use in MG] [μτγν. <κόκκινος]

⁶ In [DSMG] the abbreviation λόγ. (=λόγιος, of learned origin) is used for non popular origin words of SMG (for the dichotomy between MG words of popular and learned origin see Petrounias 2017).

In the above entry we see that ['kocinos] is described as an umbrella term for 'red', since according to [DCG], ['kocinos] is 'someone or something having the color of blood or some hue of it'. The etymological part is somehow misleading for the user concerning the semantic evolution of the word, since it is just mentioned that the predecessor of MG ['kocinos] is the HelG ['kocinos], without any reference to the fact that HelG ['kocinos] originally meant 'scarlet'.

In the case of [GOD] the entry for ΚΟΚΚΙΝΟΣ is the following (lexicon-neohel.patakis.gr/en/lexikon/lemma?id=46337):

κόκκινος [kókɛ́inos], -η, -ο (επ. (Εόμορφος)).

1) α. Για χρώμα που είναι σαν του αίματος ή για κτ που έχει το χρώμα του αίματος [examples of use and collocations in MG], β. Για κάτι που έχει σκούρο κοκκινωπό χρώμα, συνήθως σε αντιδιαστολή με κάτι άλλο που ανήκει στην ίδια κατηγορία και είναι πιο ανοιχτόχρωμο [examples of use in MG], 2) **το κόκκινο** (ως ουσ. Οσίδερο Οσίδερο) α. (μόνο στον εν.) α'. Το κόκκινο χρώμα [examples of use in MG], α'. Αντικείμενο με χαρακτηριστικό κόκκινο χρώμα [examples of use and collocations in MG], β. (μόνο στον πληθ.) Τα ρούχα, αξεσουάρ κτλ. που έχουν κόκκινο χρώμα [examples of use and collocations in MG]

[ΕΤΥΜ^ < ελνστ. κόκκινος < κόκκ(ος) 'βελανίδι βαφής' + -ινος με λεξικοποίηση |κόκκος < αρχ. κόκκος].

In the above entry the red colour is not only directly related to the colour of blood but, furthermore, a contradiction is to be noticed between the dark red colour (for which ['kocinos] is used) and other more light hues of red (for which ['kocinos] is not used). In the etymological part it is just referred that ['kocinos] goes back to HelG ['kocinos] which was formatted with the combination of the stem of ['kok:os] and the productive suffix -ινος [inos]. Actually, [GOD] is the only MG dictionary that provides us with data about the formation of predecessors of its headwords that belong to previous stages of MG.

In case of [Babiniotis] the entry for ΚΟΚΚΙΝΟΣ is the following:

κόκκινος, -η, -ο 1. αυτός που έχει το χρώμα του αίματος, της ώριμης ντομάτας [examples of use in MG] ΣΥΝ. ερυθρός, πορφυρός [...] 4. αυτός που γίνεται από ντομάτα και έχει το χρώμα της [example of use in MG] [...] [ΕΤΥΜ. μτγν. <αρχ. κόκκος. Η σημ. «ερυθρός» οφείλεται στη χρησιμοποίηση ορισμένων κόκκων πρίνου, από τους οποίους έφτιαχναν το κόκκινο χρώμα]

From the above mentioned entry we are informed that ['kocinos] is an adjective referring to someone or something 1) having the colour of blood or of the ripe tomato, and 2) being made of tomato and having the colour of tomato. Concerning the etymology of the word, we take the information that ['kocinos] appears in HelG and it comes from AG ['kok:os]. Besides, we are informed that the meaning 'red' has to do with the use of the 'berry' (gall) of kermes oak for dying something red. Finally, as synonyms of ['kocinos] (under the laber ΣΥΝ) the words [eri'θros] and [porfi'ros] are mentioned, although we should mention here that in case of [porfi'ros] in the respective entry of [Babiniotis], in the semantic part [porfi'ros] it is mentioned that [porfi'ros] means 'having the deep red color of purple-fish'. So, here we do not have an exact equivalent of 'red'.

Apart from ['kocinos], MG *ερυθρός* [eri'θros] (<AG [eru't^hros]) is used with the meaning of 'red', too. According to Chantraine (1980: 369), [eru't^hros] goes back to *hur(e)udh-* and it is attested already in Linear B tablets of Knossos in the 13th century BC. Generally, [eru't^h-]/[eri'θ-] was the root denoting various meanings connected with 'red' in Ancient and Hellenistic Greek. Cases such as *έρύθημαπροσώπου* [e'rut^h:ema pro's:opou] 'blush' (5th century BC) or *έρυθαίνω* [eri'θeno] 'make sb. blush' (2nd century BC) seems to connect the red color with the physical expression of embarrassment or timidity. A very interesting semantic change or extension is that in the LXX Is. 63.1 the collocation *έρύθ(ρ)ημα ίματίων* [e'riθ(r)ima ima'tion] means 'scarlet garments' (and not 'red garments'). In the above mentioned cases we also have the earliest attestations of a noun (and not an adjective) meaning 'scarlet or red color' and coming from [eru't^h-]/[eri'θ-]. So it seems that in the Hellenistic era [eriθ-] could also denote the meaning of [kocin-] and consequently, this extension could facilitate the use of [kocin-] meaning 'red' instead of [eriθ-] in a later stage of Greek, when ['kocinos] replaced [eri'θros]. At this point we could also refer to *ύποκόκκινος* [ipo'kocinos] 'scarlet tinged, reddish'. It is attested in the 2nd century BC and it is formed with the combination of *ύπο-* [ipo-] 'in small degree or gradual' with ['kocinos]. *ύπέρυθρος* [h'u'perut^hθros] (< [h'u'po-] 'in small degree or gradual'+ [eri'θros]) had the meaning of 'reddish' already since the 5th century BC. We could assume that if [ipo'kocinos] and

[i'periθros] meant the same in Hellenistic Greek, then this could also happen with ['kocinos] and [eri'θros].

The entry KOKKINOS in [Kriaras] is the following:

ερυθρός, επίθ. Κόκκινος: (Μάρκ., Βουλκ. 345²³ 4). [αρχ. επίθ. ερυθρός. Η λ. και σήμ.]

As in the case of KOKKINOS, we notice that in the entry definition only the meaning 'red' appears and there is no reference to other colors or hues of red (for example 'scarlet') but there is an important difference concerning the attestations of [eri'θros] in comparison to those of ['kocinos]. In [DSMG] only 3 attestations of [eri'θros] are given for the period of Late Medieval and Early Modern Greek, in contrast to 37 attestations provided for ['kocinos] in the relevant entry of [DSMG]. This is one more strong indication that already, or at least in Late Medieval Greek, ['kocinos] is the basic word for denoting 'red' in Common Greek language. On the other hand [eri'θros] is rarely used in the colloquial Greek of this period (and henceforth). Another indication for this, is that there is no ΕΡΥΘΡΟΣ entry in two representative dictionaries of Early MG, [Du Cange] and [Somavera]. The same holds true for [Skarlatos] of 19th century MG. On the contrary, in [Dimitrakos] of 20th century Greek, we are informed that [eri'θros] belongs to colloquial MG, too. [Dimitrakos]' entry for [eri'θros] is the following:

ερυθρός-ά-όν κ. μsn., νεώτ. κ. δημ., παραθ. -ότερος,-ότατος, σπαν. κ. -ώτερος, ὁ ἔχων τὸ χρώμα νωποῦ αἵματος ἢ τοῦ τοῦ μήκωνος, ὁ κόκκινος, κοκκινωπός [examples of use in Ancient, Hellenistic and Modern Greek literature] || νεώτ. τὸ οὐδ. ἐρυθρόν (ένν. χρώμα) ὡς οὐσ. ἔν τῶν θεμελιωδῶν ἀπλῶν χρωμάτων τῆς φύσεως και ἔν τῶν ἐπτὰ τοῦ ἡλιακοῦ φάσματος

In the above entry we are informed that [eri'θros] has the meaning of 'the one who has the colour of the fresh blood or the poppy, red, reddish'. Besides, [Dimitrakos] seems to be the first lexicographer of MG who provides us the information that the neuter [eri'θron] could be also a noun denoting 'one of the basic simple colours of the nature world, as well as one of the seven colours of the solar spectrum'.

In the case of [GOD] the entry for ΕΡΥΘΡΟΣ is the following (lexicon-neohel.patakis.gr/en/lexikon/lemma?id=38267):

ερυθρός [eriθrós], -ή και <λόγ.> -ά, -ό (επ. (Ε καθαρός))

<λόγ.>

1) α. Που είναι κόκκινος [examples of use in MG], β. **το ερυθρό** (ως ουσ. Ο βουνό Ο βουνό) Το ερυθρό χρώμα

[ETYM^ < αρχ. *έρυθρός*]

In the case of [GOD] [eri'θros] just appears as an equivalent to ['kocinos], as in the case of [DSMG], where the entry for ΕΡΥΘΡΟΣ is the following:

ερυθρός -ή -ό [eriθrós] Ει λόγ. θηλ. και *ερυθρά*: (λόγ., κυρ. σε ονομασίες) 1. **κόκκινος**: ~ οίνος. *Τα ερυθρά αιμοσφαίρια. Η Ερυθρά Θάλασσα. Ο Ερυθρός Σταυρός και η Ερυθρά Ημισέληνος*, διεθνείς οργανώσεις με σκοπό την προσφορά ανθρωπιστικής βοήθειας. || (ως ουσ.) το *ερυθρό*, το κόκκινο χρώμα.

[λόγ. < αρχ. *έρυθρός* & σε μτφρδ. (δες στο *ερυθροσταυρίτης*)]

In [DSMG] [eri'θros] is presented as an equivalent to ['kocinos] and, as in case of [Kriaras], it goes back to AG [eru't^hros]. The same holds true in the case of [DCG], where the entry for ΕΡΥΘΡΟΣ is the following:

ερυθρός, ή/(λόγ.) ά, ό [έρυθρός] ε-ρυ-θρός επίθ. (λόγ.): **κόκκινος** [examples of use in MG] [<αρχ. *έρυθρός*]

In [Babiniotis] the entry for ΕΡΥΘΡΟΣ is the following:

ερυθρός, -ά/-ή, -ό (λόγ.) 1. κόκκινος [examples of use in MG]

[ETYM. αρχ. <έ- προθεμ. + IE *rudh-ro, μηδενισμ. βαθμ. τού*reudh- «κόκκινος» (πβ. αρχ. *ε-ρεύθ-ω*). σανσκρ. rudhirá- «ερυθρός», λατ. ruber, γαλλ. rouge, ιταλ. rubro, ισπ. rubio, γερμ. rot, αγγλ. red κ.ά.]

As in the case of [DSMG], in [Babiniotis] [eri'θros] is presented as an equivalent to ['kocinos]. In the etymological part of the entry we are provided with ample information about the AG and IE origins of the word, including the reference to IE equivalents in other European languages. Besides, in the case of [Babiniotis], as well as in [GOD], [DSMG] and [DCG], we are provided with the indication that MG [eri'θros] is of learned origin (λόγ.=λόγιο 'of learned origin').

On the historical level we know that [eri'θros] disappeared from the everyday or the colloquial Hellenistic or Medieval Greek language and it was used only in the written learned language. The coexistence of ['kocinos] and [eri'θros]

in current Standard Modern Greek (SMG) is a result of the coexistence of the learned and the popular tradition of MG, the current stage of development of Greek, a language with a written tradition that goes back to the 14th century BC (Mycenaean Greek). This means that concerning the etymology or the history of a great amount of MG words (for the notion of *history of words* see Chantraine 1980: ix-xii) we deal with a long period of more than 3,500 years (for a discussion of how the results of the coexistence of learned and written traditions could be handled in a major lexicographic reference work, such as [DSMG], see Petrounias 2017). Learned words as [eri'θros], are not inherited words, i.e., they have not always existed or been used in the diachrony of Greek, but were re-adopted in the last two centuries from AG (Petrounias 2017: 241). On the other hand, ['kocinos] is an inherited word of popular origin that, since its appearance, has never stopped being used in every period of the Greek language. This dichotomy between the learned and the popular origin of the two words is also reflected in some of the entries of ΚΟΚΚΙΝΟΣ and ΕΡΥΘΡΟΣ already cited above.

Except from the above mentioned ['kocinos] and [eri'θros] there are also some words denoting 'red' in AG. Some of them survived in MG and other not. One of them is the word *αιμάτινος* [AG ai'matinos / HelG e'matinos] meaning 'of blood, bloody' in AG also 'red (for glass)' in HelG. The same holds true in MG, where [e'matinos] means both 'of blood' and 'red' in cases such as *αιμάτινοχρώμα* [e'matino'xroma] 'red color'. The word comes from AG *αἷμα* [^ai:ma] 'blood', and if we take into account that 1) according to our lexicographical sources it does not to attested after the middle of the 5th century AC, and 2) it does not appear as a word of MG not even in [Dimitrakos] (mid. 20th century), we should accept that it was introduced through a learned channel and especially through some literature works. For example, in the following entry from [DSMG]:

αιμάτινος -η -ο [emátinos] Ε5: 1. (σπάν.) που αποτελείται από αίμα: Αιμάτινες σταγόνες.
2. (μτφ., λογοτ.) **κόκκινος**: Αιμάτινο χρώμα / τριαντάφυλλο.
[λόγ. < αρχ. *αιμάτινος*]

where in subentry 2 [e'matinos] is referred to as an equivalent to ['kocinos], we are informed that the word is mainly used in literature (λογοτ.). It is interesting

that in the case of [Babiniotis], in the respective entry, the meaning of [e'matinos] is 'of blood, blood red' and the respective entries of [Georgacas] and [GOD]. Actually it seems that only in [DSMG] [e'matinos] is considered to be a somehow full equivalent to ['kocinos], although even in this dictionary it is indicated that we have to do with a metaphorical meaning (*μτφ.*=μεταφορικός=metaphorical) or a meaning appearing mainly in literary contexts (*λογοτ.*=λογοτεχνικός=literary). Generally, according to [DSMG] we have to do with a word of learned origin (*λογ.*=λόγιος=of learned origin).

Up to now we have examined MG words denoting 'red' going back to AG (either of Indoeuropean origin or not). One more resource of enrichment of the vocabulary of Modern Greek were languages with which Greek came in contact during Medieval times and so forth. One interesting case is *κριμιζής/κερμεζής* [cirmi'zís]/[cerme'zís] going back to Arabian *qirmizī* but entering MG through a Turkish and an Italian channel respectively, since the immediate predecessor of [cirmi'zís] is Turkish *kırmızı*, and the immediate predecessor of [cerme'zís] is Italian *chermisi*. Actually, in all the above mentioned cases we have to do with words of IE origin, meaning that the Arabian predecessor *qirmizī* goes back to Persian *kirm* 'worm (used for dye)' < IE *kʷr̥mi-* 'worm, grub' (Pokorny 1959: 649, [DSMG]: entry ΚΡΕΜΙΖΗΣ). [cirmi'zís]/[cerme'zís] did not survive in Standard Modern Greek (SMG). DVMG provides the following entry for ΚΙΡΜΙΖΗΣ:

κριμιζής, επίθ.: *κερμεζής*. ουδ. *κριμίζιν*: *χριμιζίν*.

Το αραβοτουρκ. *kırmızı*. Ο τ. *κριμίζιν* στο Du Cange. Τ. *κριμιζί* και *κριμιζί* σήμ. ιδιωμ. (Παγκ., Ιδιώμ. Κρ. Ε' και ΣΤ'), καθώς και τ. *κερμεζί* στο Somav. και σήμ.

Κόκκινος, ερυθρός: *καβάδιον κερμεζήν χαμουχάν μετά βαρέων καταρούχων ενδεδουμένον* Ψευδο-Σφρ. 290'. Το ουδ. ως ουσ. = 1) *Κόκκινη βαφή: εντελημπροστέληνα, με το χρυσοπετάλιν, βαμμένα με το χριμιζίν* (Διήγ. παιδ. (Tsiouni) 761. 2) *Κόκκινο ύφασμα: έτερος δε ελθών ... συντροφεύσας μετ' αυτών εις κριμίζιν*.

In the above entry we are informed that at least [cerme'zís] is attested in a chronicle of the mid 16th century. What survived was a variant of [cirmi'zís]/[cerme'zís], [crimi'zís]/[creme'zís] (obviously from [cirmi'zís]/[cerme'zís] through a metathesis of [r]). The word is attested in [Du Cange] in the following entry:

KPIMI'ZIN, *Coccus*, ex Ital. *Cremesino*, & Gall. *Cramoisy*. Vox formata ab Arabica *Kermes*, *Coccus*. Laonicus lib. 3. Extr. φέρει κριμίζιν σπράν.

In the above entry [Du Cange] gives as equivalent of the noun [cri'mizin] the Latin *coccus*, which could mean either 'insect dye for use', 'scarlet cloth' or 'scarlet dye' and he relates etymologically [cri'mizin] with Italian *cremesino* and Arabian *Kermes* (sic). In any case, for [Du Cange] in 17th century [cri'mizin] is not an equivalent to 'red' but to 'scarlet'. The same holds for [Somavera] (18th century), where we have the following entry for KPHEMEZI:

Κρεμεζί, τὸ. Cociniglia.

Obviously, [Somavera] relates [creme'zi] with cochineal, the insect from which the dye carmine is derived. On the contrary, in 20th MG lexicography the relation between 'red' and the noun [cre'mezi] or the adjective [creme'zis] reappears. So, in Dimitrakos we have the following entries:

κρεμέζι(ον) (τὸ) νεώτ. κ. δημ. ἐρυθρὰχρωστικὴοὐσία. βλ. κέρμη.

κρεμεζύς-ιά-ύδημ. ὀχρώματοςἐρυθροῦ, ἐρυθρός: κρεμεζύγαρύφαλο.

In the above entries both in the case of [cre'mezi] and [creme'zis] the meaning is directly related with 'red', since in the case of the noun we are informed that [cre'mezi] is a red dye, while the adjective [creme'zis] is referred to as a full equivalent of [eri'θros]. Almost the same holds true in the case of [DSMG], where we have the following entries:

κρεμέζι το [kremézi] O44: κόκκινη χρωστική ουσία που παράγεται από ένα είδος εντόμου. [ιταλ. chermes < αραβ. qirmizi κατά το κρεμεζί]

κρεμεζής -ιά -ί [kremezis] E8 & **κρεμεζί** [kremezi] E (άκλ.): που έχει το χρώμα του κρεμεζιού· κοκκινωπός. || (ως ουσ.) το κρεμεζί, το κρεμεζί χρώμα.

[παλ. ιταλ. *cremes(i) -ής (πρβ. ιταλ. cremisi ([kré-]), chermisino ([-zi-]), ισπαν. cre mesin ([-sín])) < αραβ. qirmizi· παλ. ιταλ. *cremes]

In the above entries in the case of [cre'mezi] we are informed that it is a red dye derived from a kind of insect, but in the case of [creme'zis] except from the meaning 'having the color of [cre'mezi]' (consequently red, since [cre'mezi] is a red dye), in the case of the noun [creme'zi] we are informed that we don't have to do exactly with 'red' but with 'reddish'. [Babiniotis] seems to be trying to

take a middle position between [Dimitrakos] and [DSMG]. The respective entries of [Babiniotis] are the following ones:

κρεμέζι (το) κόκκινη φυσική χρωστική ουσία, που παράγεται από το έντομο κέρμη.

[ETYM. μεσν. < τουρκ. kırmızı]

κρεμεζής, -ιά, -ί **1.** αυτός που έχει το κόκκινο χρώμα του κρεμεζιού [examples of use in MG] **2.** **κρεμεζί** (το) το κόκκινο χρώμα στην απόχρωση του κρεμεζιού.

In the case of [cre'mezi] the semantic part of the entry is nearly the same with that of [DSMG] but in the case of [creme'zis], according to [Babiniotis], we don't have an exact equivalent of ['kocinos] but 'something having the red colour of [cre'mezi]' or, in the case of the noun [creme'zi] 'the red colour in the hue of [cre'mezi]'. The same seems to hold true in the case of [DCG], where we have the following entries:

κρεμέζι κρε-μέ-ζι ουσ. (ουδ.): κοκκινωπή χρωστική ουσία. [ιταλ. <chermes]

κρεμεζής, -ιά, -ί κρε-με-ζής επίθ. (λογοτ.): που έχει το ζωηρό κόκκινο χρώμα του κρεμεζιού.

Finally, in the case of [GOD] [cre'mezi] and [creme'zis] are related with *deep red*, as we see in the following entries:

κρεμέζι [kremézi], το (ουσ. Ο καρδιοχτύπι)

Φυσική χρωστική ουσία με έντονο κόκκινο χρώμα που παράγεται από το έντομο κέρμη.

κρεμεζής [kremezís], -ιά, -ί (Ε σταχτής) και **κρεμεζί [kremezi]** (ακλ.) (επ.)

1) Για κτ που έχει βαθύ κόκκινο χρώμα ή για χρώμα που είναι βαθύ κόκκινο [examples of use in MG] **2) (ως ουσ. Ο άκλ. Ο άκλ.) (μόνο στον εν.) Το κρεμεζί χρώμα**

As in the case of ['kocinos] in no one of the entries we examined [cirimi'zis]/ [creme'zis] are we provided with an indication that we have to do with a word of learned origin.

Summary and outlook

In this chapter we examined the MG equivalents for 'red' as they appear in important lexicographical resources of MG. The data we presented show that the words denoting 'red' in MG originate from various periods in the history of Greek, since they can be either as old as to be attested in Linear B tablets of 13th century BC ([eri'θros]) or younger and going back to Hellenistic (['kocinos])

or Medieval Greek ([cirmi'zis]), something which is logical since we have to do with a language with a long history of more than 3,500 years. Besides, as in the case of every language, in MG vocabulary the contacts between Greeks and their language with other people and their languages are reflected. Consequently, we saw that [cirmi'zis]/[creme'zis] constitute two of the ample attestations of the contacts between Byzantine Greeks and Italians and Turks.

The words we examined are also differentiated concerning their popular ([kocinos], [cirmi'zis]/[creme'zis]) or learned origin ([eri'θros], [e'matinos]), thus reflecting two basic channels of formation or enrichment of MG vocabulary. This dichotomy is indicated by the four modern MG dictionaries from which we drew data: [DSMG], [Babiniotis], [DCG] and [GOD]. All of them were composed during the last decade of the 20th century and later, when the distinction between popular and learned words in MG has been totally accepted by the linguistic scientific community (also through pioneer studies as the one of Setatos 1969). It goes without saying that this distinction could not appear in older lexicographical works we examined, although in the case of Dimitrakos (1st half of the 20th century) we have the distinction between words belonging to Demotic Greek or not, since this dictionary is composed in a period when the Greek language question was still far from being solved⁷. Thus, Dimitrakos provides its users with the information that all the words for 'red' we examined were Demotic Greek words already in its era (independently of their popular or learned origin).

The dictionaries we examined converge concerning which word is a MG equivalent for 'red' especially in the case of the two basic terms for 'red' in this language: [kocinos] and [eri'θros], although it is obvious that, at least in case of recently published dictionaries of MG, the first place belongs to [kocinos], since it is characteristic that (with the little exception of [Babiniotis], where [kocinos] is

⁷ The Greek language question was a dispute about whether the vernacular language of the Greek people (Demotic Greek) or a cultivated imitation of AG (Katharevousa) should be the official language of the Greek nation. This highly controversial topic in the 19th and 20th centuries was finally resolved in 1976, when Demotic was definitely declared as the only official linguistic system of the Republic of Greece (Mackridgē 2014: 145-147).

mentioned as a synonym of [eri'θros] in the ΕΡΥΘΡΟΣ entry) in the definition part of ΚΟΚΚΙΝΟΣ entries we are not provided with a synonymic definition of the type '[kocinos] is [eri'θros]'. On the contrary, in every ΕΡΥΘΡΟΣ entry (either synonymic, sentential or both) we are without exception informed that '[eri'θros] is [kocinos]'. Thus, the compilers of the dictionaries under examination seem to believe that the term for 'red' that every Greek is expected to most easily understand is [kocinos] and that's why they provide it as an equivalent for [eri'θros] but not the opposite. This does not hold true in the case of Dimitrakos, where [eri'θros] is provided as an equivalent of [kocinos], and this has to do with the fact that this dictionary is addressed to a public living in an era when Demotic Greek and Katharevousa are still fighting in the frame of language planning in Greece, and since [eri'θros] is preferred (as a word of learned origin) by the fans of Katharevousa, while [kocinos] is considered as a more Demotic Greek word, Dimitrakos provides its users with both equivalents even in the definition parts of the relevant entries.

Concerning the sentential definitions of MG denoting 'red' our data show that in case of clearly monolingual dictionaries⁸ of SMG ([DSMG], [Babiniotis], [GOD], [DCG]) our data show that [kocinos] is connected with the colour of blood. Only in [Babiniotis] we are informed that except of the color of blood, [kocinos] is also something having the color of a mature tomato. This connection with blood also appears in the ΕΡΥΘΡΟΣ entry of [Dimitrakos], where [eri'θros] is something having the colour of fresh blood (or poppy). Thus, it is very interesting that MG [e'matinos], going back to [ema] 'blood' and literally meaning 'of blood, bloody, bloodied', only in [DSMG] is referred to as an equivalent to [kocinos]. In every other case, [e'matinos] is connected with 'bloodred' and not simply 'red'.

⁸ By 'monolingual dictionaries' we refer to those dictionaries where the headwords do not belong to the same functional code as the language of explanation.

Polish and Portuguese: shared etymons, digressive lexical outputs (on the basis of colour names)

Przemysław Dębowiak, Alina Villalva & Esperança Cardeira

On the face of it, Polish and Portuguese have little in common. However, since both of these languages belong to the Indo-European family, it is reasonable to expect that some common features, namely in the lexical domain that is our field of expertise, may lie somewhere, waiting to be unveiled. In this paper, we would like to present findings of research that looked for remnants of a putative ancestral relationship between Polish and Portuguese by indicating the way that some Indo-European roots have evolved and are conserved in both languages.

The basis of the analysis that we have carried out is composed of Polish and Portuguese colour adjectives. The choice of this particular subset of the lexicon is due to the fact that they present serious lexicological difficulties. Colour words refer to personal synesthetic experiences that raise conceptual problems that are similar in every language, as well as common naming issues. We have limited our study to a subset of colour adjectives, given their higher frequency and the expectation that their context of usage might help us to observe better any interesting semantic evolution.

We have checked the origin of each of the selected colour adjectives. Once its IE root has been established, we have also ascertained if it survived (in the same form or in another one, with different ablaut grades) in other words, in the same language and in the other one, with special attention paid to the meaning of these words. The output of this research allowed us to confirm that there are remnants of different Proto-Indo-European roots in contemporary Polish and Portuguese, even if they have gained slight or strongly different meanings;

on the other hand, there are synonymous roots that present a parallel semantic development from diverse IE roots. We will present some examples of both cases.

Hence, this paper looks at a tentative study of historical lexical semantics, and it also highlights that these two languages, Polish and Portuguese, although they apparently never had anything to do with each other, they still preserve traces of a remote common past.

Short presentation of Polish and Portuguese

Polish and Portuguese are akin in the sense of belonging to the same Indo-European family of languages, but they pertain to two different branches: Balto-Slavic and Italic, respectively. As both languages have had practically no direct contact with each other throughout history, one could think that they do not have much in common. Indeed, even the lexicon, which is the level of the linguistic system most likely to show contacts and influences between any two languages, does not have many correlations. There are obviously lots of words that have been borrowed in Polish and in Portuguese independently from the same source (mainly from Latin / Greek, French and English¹), but when it comes to Portuguese loanwords in Polish and to Polish loanwords in Portuguese, there are almost none – and if so, indirectly².

Let us now present an outline of the history of both languages. It should help us to demonstrate their independent and distant paths of evolution.

¹ E.g.: Pol. *demokracja*/Port. *democracia*, Pol. *teatr*/Port. *teatro*, Pol. *muzyka*/Port. *música*, Pol. *konstytucja*/Port. *constituição*, Pol. *rubryka*/Port. *rubrica*, Pol. *ordynarny*/Port. *ordinário* (Greek and Latin), Pol. *abazur*/Port. *abajur*, Pol. *żakiet*/Port. *jaqueta*, Pol. *obój*/Port. *oboé* (French), Pol. *hokej*/Port. *hóquei*, Pol. *wagon*/Port. *vagão*, Pol. *kowboj*/Port. *cowboy* (English).

² E.g. Pol. *autodafe*/*auto da fé*, *marmolada*, *kobra*, *fawela*, Port. *złoty*/*zlóti*, *mazurca*, *voivoda*.

POLISH³

Polish belongs to the Lechitic subgroup of West Slavic languages. It descends from Proto-Slavic which, according to most linguists, formed a common branch with Proto-Baltic named Balto-Slavic – a group of Indo-European satem languages. The dialectal segmentation of Proto-Slavic began in the 3rd century, when a part of the Slavic people started leaving their territories (covering partially contemporary Poland, Ukraine and Belarus) and moving towards the Neman river basin, Volhynia and Podolia; it continued after the 6th century with the Slavic people's migration towards the Balkan Peninsula. By 1000 AD, the Slavic linguistic area had already split into three big dialectal groups: East, West and South Slavic.

The Polish state formally came into existence in the mid-10th century. The Baptism of Poland in 966 was an important factor which helped to consolidate various tribes living within the borders of the country and to affirm its unity in the international arena. The Polish language developed on the basis of different dialects spoken in Poland, with a domination of the Greater Poland and Lesser Poland dialects. The earliest written records in Polish date back to 1136. During the synod in Łęczyca (1285), it was decided that sermons must be preached in Polish and without knowing this language one could not become a teacher in cathedral and monastery schools. The first texts in Polish, mainly translations of selected parts of the Bible, were published starting from the end of the 13th century. Polish literature flourished in the 16th century, when the Polish language was accepted on a par with Latin.

In the Middle Ages, the Polish lexicon was influenced by Czech and German. In the 16th century one can notice a bigger afflux of Italian, Latin and Greek vocabulary. In later history, a French impact was mostly remarkable, but there are also borrowings from Turkish and Eastern Slavic languages. During the 19th century, when Poland did not exist on the map of Europe because of partitions, the eastern regions of the country suffered from russification, while its western

³ For more details, see e.g. Klemensiewicz (1999).

and southern parts were subjected to German influences. In recent time, English has mainly been providing new vocabulary to Polish.

In the 16th century, after the Reformation, the importance of the Polish language had been growing in Central and Eastern Europe. In 1696, it became the official language of the Grand Duchy of Lithuania (while in Poland this position was occupied by Latin until 1763). From the mid-16th century till the beginning of the 18th century, Polish was the language used at the Russian court and by higher social classes in Russia. In the 17th century, it also played an important role in the Principalities of Moldavia and Wallachia, as well as in Ukraine.

Today, judging on the criterion of the number of users, Polish is the second most spoken Slavic language (after Russian) – by more than 40 million people living in Poland and outside the country in diaspora.

PORTUGUESE⁴

Portuguese is one of the languages arising from the fragmentation of Vulgar Latin, thus belonging to the Italic branch of the family of Indo-European languages. Vast territorial extension of the area where Latin was spoken, isolation of different territories, and existence of specific linguistic features of each geographical area were the most decisive factors behind the fragmentation process. In the northwest of the Iberian Peninsula, Galician and Portuguese shared the same birth process until the 15th century: both languages suffered the influence of substrate languages, mostly Celtic, Iberian (completely replaced by Latin in the early Middle Ages) and Basque. Later, the Germanic (5th century) and Arabic (8th century) invasions added a Germanic and Arabic lexical heritage to the Latin and pre-Latin basis. By the 10th century, in the region that now corresponds to Galicia and the north of Portugal, there was already a particular spoken romance; this romance, Galician-Portuguese, was the language of the Iberian medieval lyric until the 14th century.

The kingdom of Portugal, independent since 1143, spread to the south and to the western strip of the peninsula, thus drawing, in about a century, one of the oldest and most stable borders of Europe. The oldest document written in

⁴ For more details, see e.g. Cardeira (2006).

Portuguese dates from these times (1175); in the 13th century, the Chancellery adopted Portuguese as the written language for its royal documents.

Galician-Portuguese poetry lasted up to 1350. Yet, by the end of the 14th century Portuguese and Galician took diverging directions and Portuguese started a standardization process, which led to the development of the national language. In the 15th century an expansionist period began and Lisbon, the capital, became a commercial emporium as well as a receiver-spreader centre of Asian, African and American vocabulary. Portuguese, in addition to being spoken in America (Brazil), was also used as a communication language on the African coast and in some ports of India and Southeast Asia, which led to the formation of Portuguese-based Creoles. As the result of expansion during colonial times, Portuguese is nowadays spoken in countries located on five continents and occupies a major place among the most spoken languages in the world.

Corpus and methodological issues

As has already been mentioned, contemporary colour adjectives in Polish and Portuguese were the basis for our research. Apart from a small number of studies (i.e. Kobędza 2014, Stala & Dębowski 2016), there is practically no comparative work regarding Polish and Portuguese colour names, which, we believe, assigns to our study a greater interest and opportunity.

The adjectives that have been selected correspond to the eleven basic colour names as established by Berlin and Kay (1969): *white, black, red, green, yellow, blue, brown, purple, pink, orange* and *grey*. Then, supplementary criteria were applied: relatively recent adjectives (like Pol. *niebieski* 'blue', Port. *castanho* 'brown', *cor-de-rosa* 'pink', *cinzento* 'grey') as well as recent borrowings (like Pol. *brązowy* 'brown', *fioletowy* 'purple', *różowy* 'pink', *pomarańczowy* 'orange', Port. *azul* 'blue', *cor-de-laranja* 'orange') have been excluded, in order to retain only old vocabulary in the corpus – we are looking for words that have been inherited from the proto-languages of both languages under consideration: Proto-Slavic for

Polish and Latin for Portuguese⁵. Thus, we have selected twelve colour adjectives, six from each language, namely:

- Polish – *biały* ‘white’, *czarny* ‘black’, *czerwony* ‘red’, *zielony* ‘green’, *żółty* ‘yellow’ and *szary* ‘grey’;
- Portuguese – *branco* ‘white’, *preto* ‘black’, *vermelho* ‘red’⁶, *verde* ‘green’, *amarelo* ‘yellow’ and *roxo* ‘purple’.

The data related to each adjective has been collected in tables in order to provide complete and comparable information. Each table is organised as follows:

⁵ The etymology of these adjectives is quite informative:

a) Polish (cf. Stala & Dębowski 2016: 55–56):

- *niebieski* ‘blue’ (14th century) < *niebo* ‘sky’ ← Proto-Slavic **nebo*, Gen. **nebese* ‘firmament, sky’;
- *brązowy* ‘brown’ (19th century) < *brąz* ‘brown colour; alloy of copper with other metals’ ← Fr. *bronze* ‘alloy of copper and zinc’ ← It. *bronzo* ‘alloy of copper and tin’ ← (?) Late Lat. **brundium* / **bruntium*;
- *fioletowy* ‘purple’ (17th century) < *fiolet* ‘purple colour’ ← Germ. *Violett* ‘purple; purple colour’ ← Fr. *violette* ‘viola’ < O.Fr. *viole* ‘id.’ ← Lat. *viola*;
- *różowy* ‘pink’ (18th century) < *róża* ‘rose’ ← Old High German *rōsa* ‘id.’ ← Lat. *rosa*;
- *pomarańczowy* ‘orange’ (18th century) < *pomarańcza* ‘orange’ ← It. *pomo d’arancia*, where *arancia* ‘orange’ ← Ar. *nāranġ* ← Pers. *nārang* ← Sanskr. *nāraṅga*;

b) Portuguese:

- *castanho* ‘brown’ (13th century as ‘chestnut tree’; 15th century as a colour adjective) ← Lat. *castāneus*_{ADJ} ‘chestnut’ < (*nux*) *castānea*_{Nf} ‘chestnut’ ← Gr. *κάρυα καστώνεια* / *κασταναῖα* ‘id.’ < *κάστανον* ‘id.’ ← foreign, non-IE origin;
- *cor-de-rosa* ‘pink’ (16th century) ← < *rosa* ‘rose’ ← Lat. *rosa*;
- *cinzento* ‘grey’ (16th century) < *cinza* ‘ash’ ← Lat. **cin̄sia* ‘ashes mixed with embers’ < *cinis*, Gen. *cineris* ‘ash’;
- *azul* ‘blue’ (14th century) ← Vulg. Ar. **lāzūrd* ← *lāzawārd* ← Pers. *lā(d)żward* ‘lapis lazuli’;
- *cor-de-laranja* ‘orange’ (16th century) < *laranja* ‘orange (fruit)’ ← Hispanic Ar. *naraṅga* ← Ar. *nāranġ* ← Pers. *nārang* ← Sanskr. *nāraṅga*.

⁶ We have intentionally omitted the other adjective that exists in European Portuguese to denominate the red colour, namely *encarnado*, as it is not the basic one and it constitutes a European Portuguese lexical innovation (Brazilian Portuguese does not use it at all). See Silvestre, Villalva & Pacheco (2014).

colour adjective	
1 st attestation	
etymology	
derivatives & compounds that refer to this colour	
etymologically related words that do not refer to this colour	
Polish / Portuguese words containing the same PIE root or one of its variants	
references	

All the information that we have gathered comes from well-established references that have been selected to provide possibly the most complete information related to this twelve adjectives. Most of these references are from etymological dictionaries and other sources providing reliable reconstructions of Proto-Slavic and Latin words, as well as Proto-Indo-European formations and roots (Boryś SEJP, Snoj SES, EDSIL, DCECH, DELP₁, DELP₂, HP, DELL, IEW, LIV; see References)⁷.

Even though the analysis of the data has been carried out upon contemporary colour adjectives, the presentation of the results will go in the opposite direction, starting from PIE roots. This will ensure a better legibility of the information and it will also help to clearly demonstrate the common past of Polish and Portuguese.

We will now consider five Polish roots and five Portuguese roots separately, since they do not share the same etymon. Finally, we will consider one colour adjective that has the same origin in both languages.

POLISH ADJECTIVES

As previously stated, we will consider five adjectives (black, grey, red, green and yellow). Four of them have no Portuguese cognates (i.e. *czarny*, *szary*, *zielony* and *czerwony*); the other one (i.e. *żółty*) does have a Portuguese cognate, though it is not a colour name (i.e. *fel* 'bile'). Consider a more detailed information on each of these roots.

⁷ We do not provide all forms and modifications because of the lack of information in the sources or in order to keep the reasoning clear.

The first set regards adjectives that have no Portuguese cognates:

czarny 'black'	
1 st attestation	15 th century
etymology	PIE <i>*kers-</i> 'black, dark, dirty' > <i>*kr̥s-</i> > <i>*kr̥sno-</i> → <i>*k̥irsno-</i> 'black, dark' → PS <i>*č̥br̥n̥</i> 'very dark, black' → Pol. czarny 'black'
derivatives & compounds that refer to this colour	czerni _{Nf} 'black', czarno _{Adv} 'blackly', czernieć _v 'to blacken, turn black', oczerniac _v 'to blacken, denigrate'
etymologically related words that do not refer to this colour	NONE
references	Boryś SEJP s.v. <i>czarny</i> Snoj SES s.v. <i>č̥r̥n</i> EDSIL: 92 IEW: 583 IEL: https://lrc.la.utexas.edu/lex/master/0945
szary 'grey'	
1 st attestation	15 th century
etymology	PIE <i>*kei(h)-</i> 'dark colour: brown, grey' > <i>*keiro-</i> > <i>*koiro-</i> → <i>*choiro-</i> → PS <i>*ch̥ě̯r̥</i> 'of the colour of ash, grey' → Occid. PS <i>*šar̥</i> → Pol. szary 'grey'
derivatives & compounds that refer to this colour	szarość _{Nf} 'grey, greyness', szaro _{Adv} 'greyly', szarzeć _v 'to grey' metaphorical derivatives: szaruga _{Nf} 'long period of rainy weather', szarówka _{Nf} 'dusk'
etymologically related words that do not refer to this colour	PIE <i>*kei(h)-</i> > <i>*keido-</i> > <i>*koido-</i> → <i>*choido-</i> → PS <i>*ch̥ě̯r̥</i> → Occid. PS <i>*šad̥</i> 'grey' → Old Pol. <i>szady</i> > 1) Pol. szadz _{Nf} 'hard rime' (because of the greyish colour of the hard rime), 2) Old Pol. <i>szedziwy</i> → Pol. szedziwy _{Adj} 'aged, hoar' PIE <i>*kei(h)-</i> > <i>*kih_{uo}-</i> > <i>*ki_{uo}-</i> → PS <i>*siv̥</i> 'greyish' → Pol. siwy _{Adj} 'grey (especially about hair), hoar' PIE <i>*kei(h)-</i> > <i>*kih_{njo}-</i> > <i>*kinjo-</i> → PS <i>*sinj̥</i> 'blue' → Pol. siny _{Adj} 'blue, livid'
references	Boryś SEJP s.v. <i>szary</i> , s.v. <i>szadz</i> , s.v. <i>siwy</i> , s.v. <i>siny</i> , s.v. <i>szedziwy</i> Snoj SES s.v. <i>siv̥</i> EDSIL: 451-452 IEW: 540-541 IEL: https://lrc.la.utexas.edu/lex/master/0866
zielony 'green'	
1 st attestation	15 th century
etymology	PIE <i>*ǵ^helh₃-</i> 'to shine', also naming bright colours > <i>*ǵ^helh₃eno-</i> → PS <i>*zelen̥₃</i> 'green' → Pol. zielony 'green'
derivatives & compounds that refer to this colour	zieleń _{Nf} 'green', zielono _{Adv} 'greenly', zielenieć _v 'to turn green', zielenina _{Nf} 'vegetables', ziele _{Nn} 'herb', zioto _{Nn} 'herb'
etymologically related words that do not refer to this colour	PIE <i>*ǵ^helh₃-</i> > <i>*ǵ^holh₃-</i> > <i>*ǵ^holh₃to-</i> → PS <i>*zolt̥</i> 'golden' 1) → Pol. zoty _{Adj} 'golden', 2) > PS <i>*zolto₃</i> 'gold' → Pol. złoto _{Nn} 'gold'

references	Boryś SEJP s.v. <i>zielony</i> , s.v. <i>ziele</i> , s.v. <i>zióło</i> , s.v. <i>złoty</i> Snoj SES s.v. <i>zelen</i> , s.v. <i>zēl</i> , s.v. <i>zlāt</i> EDSIL: 541-542, 547 IEW: 429-434 IEL: https://lrc.la.utexas.edu/lex/master/0637
<i>czerwony</i> ‘red’	
1 st attestation	15 th century
etymology	PIE <i>*k^uru-</i> ‘worm, maggot’ → <i>*kīruǵ</i> → PS <i>*čьrvь</i> ‘worm, larva of insects’ > (<i>*čьrviti</i> ‘to lay eggs (of insects); to dye red’ >) <i>*čьrvenъ</i> ‘tinted with maggot, red’ → Pol. <i>czerwony</i> ‘red’
derivatives & compounds that refer to this colour	<i>czerwień</i> _{Nf} ‘red, redness’, <i>czerwono</i> _{Adv} ‘redly’, <i>czerwienić</i> (<i>się</i>) _V ‘to make red’; ‘to turn red; to blush’, <i>zaczerwienienie</i> _{Nm} ‘reddening, rubefaction’
etymologically related words that do not refer to this colour	PIE <i>*k^uru-</i> → <i>*kīruǵ</i> → PS <i>*čьrvь</i> → Pol. <i>czerw</i> _{Nm} ‘worm, larva of insects’ > <i>czerwiec</i> _{Nm} ‘June’ (period when worms appear most or when most insects producing red dye are caught) PIE <i>*k^urmi-</i> → <i>*kīrmī</i> → PS <i>*čьrmь</i> ‘worm, maggot’ > <i>*čьrmьnъ</i> ‘tinted with maggot, red’ → Dial. Pol. <i>czermony</i> ‘red’
references	s.v. <i>czerwony</i> , s.v. <i>czerw</i> , s.v. <i>czerwiec II</i> Snoj SES s.v. <i>črǵ</i> EDSIL: 91-94 IEW: 649

Three contemporary Polish adjectives (i.e. *czarny*, *szary* and *zielony*) originate from two PIE roots that also referred to a colour. The meanings of other words related to these roots result from association to a dark colour or a bright one, too, a fact that seems not to need further explanation.

The Polish adjective *czerwony* ‘red’ has a metonymical origin, which refers to the raw matter used to produce the pigment that yields the colour red.

The second set regards adjectives that have Portuguese cognates:

<i>żółty</i> ‘yellow’	
1 st attestation	15 th century
etymology	PIE <i>*g^helh-</i> ‘to shine’, also naming bright colours > <i>*g^helh₃to-</i> → <i>*g^hlto-</i> → <i>*gīlto-</i> → PS <i>*žьltъ</i> ‘yellow’ → Pol. <i>żółty</i> ‘yellow’
derivatives & compounds that refer to this colour	<i>żółć</i> _{Nf} ‘yellowness; bile’, <i>żółto</i> _{Adv} ‘yellowly’, <i>żółknąć</i> _V ‘to turn yellow’, <i>żółtko</i> _{Nn} ‘yolk’

etymologically related words that do not refer to this colour	<p>PIE <i>*g^helh₃-</i> > <i>*g^hel(H)ū-</i> → PS <i>*žely</i>, Gen. <i>*žьlъve</i> ‘turtle’ → Pol. <i>żółw_{Nm}</i> ‘turtle’ (because of the colour of turtle’s shell)</p> <p>PIE <i>*g^helh₃-</i> > <i>*g^hl̥-</i> > <i>*g^hl̥nā-</i> → <i>*gilnā</i> → PS <i>*žьlna</i> ‘bee-eater’ → Pol. <i>żółna_{Nf}</i> ‘bee-eater’ (because of the colour of the feathers on a bee-eater’s throat)</p> <p>PIE <i>*g^helh₃-</i> > <i>*g^hleh₂d^hū-</i> ‘shining, smooth’ → PS <i>*gladъ</i> ‘plain, smooth’ > 1) <i>*gladъkъ</i> → Pol. <i>gładki_{Adj}</i> ‘plain, smooth’, 2) <i>*gladiti</i> ‘to make plain, smooth’ → Pol. <i>gładzić_V</i> ‘to stroke, smooth’</p> <p>PIE <i>*g^helh₃-</i> > <i>*g^hlend^(h)-</i> ‘to shine, look’ > PS. <i>*ględati</i> (<i>*ględēti</i>) ‘to look’ > <i>*o(b)ględati</i> → Pol. <i>ogłądać_V</i> ‘to watch, see, look’</p>
Portuguese words containing the same PIE root or one of its variants	<p>PIE <i>*g^hel-</i> > Lat. <i>fel</i>, Gen. <i>fellis</i> (← <i>*fel-n-is</i>) ‘bile’ (maybe of dialectal origin because of the presence of <i>f-</i>) → Port. <i>fel_{Nm}</i> ‘bile’ (because of the colour of this liquid)</p>
references	<p>Boryś SEJP s.v. <i>żółty</i>, s.v. <i>żółc I</i>, s.v. <i>żółc II</i>, s.v. <i>żółknąc</i>, s.v. <i>żółw</i>, s.v. <i>żółna</i>, s.v. <i>gładki</i>, s.v. <i>gładzić</i>, s.v. <i>ogłądać</i></p> <p>Snoj SES s.v. <i>žôlt</i>, s.v. <i>žôlč</i>, s.v. <i>žêlva</i>, s.v. <i>žôlna</i>, s.v. <i>gláditi</i>, s.v. <i>ględati</i></p> <p>EDSIL: 162-164, 557, 565-566</p> <p>IEW: 429-434</p> <p>IEL: https://lrc.la.utexas.edu/lex/master/o637</p> <p>LIV: 200</p> <p>DELP₁ s.v. <i>fel</i></p> <p>DELP₂ s.v. <i>fel</i></p> <p>HP: 109</p> <p>DCECH s.v. <i>hiel</i></p> <p>DELL s.v. <i>fel</i></p>

The same root is present in animal names (in Polish) and its variant occurs in the denomination of bile (in Portuguese), a fact that can be explained by their effective colour. In the other words (Pol. *gładki*, *gładzić*, *ogłądać*), the idea of shining is preserved.

It is worth noting that the names for green and yellow have similar remote origin not only in Polish, but also in other Slavic languages; cf. the synonymous roots **ǵ^helh₃-* and **g^helh₃-* that Pokorny and other authors consider as variants of the same root (e.g. IEW 429-434). It is thus possible that initially, they were merely perceived as bright colours and no further distinction seems to be available at this time.

PORTUGUESE ADJECTIVES

The set of five Portuguese adjectives that we have studied is not identical to the Polish set: the root for grey has been excluded and we have added the root for purple. The remaining adjectives refer to the same colours (i.e. green, yellow, black and red). Two of these adjectives have no Polish cognates (i.e. *verde*

and *amarelo*); the other three (i.e. *preto*, *vermelho* and *roxo*) do have Polish cognates, though, again, they are not all colour names (i.e., respectively *prać* ‘wash, launder, beat’; and *wierzba* ‘willow’). The exception is *roxo* that does have a colour cognate, but the colour is not the same (i.e. *rudy* ‘red, ginger, rufous’). Consider more detailed information on each of these roots.

The first set regards adjectives that have no Polish cognates:

verde ‘green’	
1 st attestation	10 th century
etymology	PIE <i>*ueis-</i> ‘to sprout, grow, flourish’ > Lat. <i>uirēre</i> ‘to be green’ > <i>uiridis</i> ‘green’ → Port. verde ‘green’
derivatives & compounds that refer to this colour	esverdear _v ‘to turn green’, reverdecer _v ‘to become green again’, esverdeado _{ADJ} ‘greenish’, verdejante _{ADJ} ‘green; verdant’, verdura _{Nf} ‘green vegetable’, verdete _{Nm} ‘verdigris’
etymologically related words that do not refer to this colour	NONE
references	DELP ₁ s.v. <i>verde</i> DELP ₂ s.v. <i>verde</i> DCECH s.v. <i>verde</i> DELL s.v. <i>uireō</i> IEW: 1133 LIV: 671–672 IEL: https://lrc.la.utexas.edu/lex/master/2123

amarelo ‘yellow’	
1 st attestation	12 th century
etymology	PIE <i>*om-</i> ‘raw, coarse, bitter’ > Lat. <i>amārus</i> ‘bitter’ > <i>*amarellus</i> ‘bitterish’ → Port. amarelo ‘yellow’
derivatives & compounds that refer to this colour	amarelar _v ‘to yellow’, amarelado _{ADJ} ‘yellowish, pale’, amarelecer _v ‘to become yellow’, amarelecido _{ADJ} ‘yellowish, old’, amarelecimento _{Nm} ‘yellowness’
etymologically related words that do not refer to this colour	PIE <i>*om-</i> > Lat. <i>amārus</i> ‘bitter’ > Hisp. Lat. <i>*amaricus</i> → Port. amargo _{ADJ} ‘bitter’
references	DELP ₁ s.v. <i>amarelo</i> , s.v. <i>amargo</i> DELP ₂ s.v. <i>amarelo</i> , s.v. <i>amargo</i> HP: 43 DCECH s.v. <i>amarillo</i> , s.v. <i>amargo</i> DELL s.v. <i>amārus</i> IEW: 777–778 IEL: https://lrc.la.utexas.edu/lex/master/1418

Both these roots, that originally had no reference to colour, have scarcely been productive in Latin and even less in Portuguese. Besides Portuguese *amargo*, they have left no semantic continuance. The names of green and yellow result from different metaphors: the meaning ‘green’ comes from the idea of growth

and vitality (characteristic to plants) and the meaning ‘yellow’ originates from the association to the bitterness of bile.

The second set regards adjectives that have Polish cognates:

preto ‘black’	
1 st attestation	13 th century
etymology	PIE <i>*per-</i> ‘to hit, strike’ > <i>*pr-</i> > <i>*pret-</i> > Lat. <i>pressus</i> ‘pressed, tightened’ → <i>*prettus</i> → Port. preto ‘black’
derivatives & compounds that refer to a colour	NONE
etymologically related words that do not refer to this colour	PIE <i>*per-</i> > <i>*pr-</i> > <i>*prem-</i> > Lat. <i>premere</i> ‘to press’: 1) → Port. premer / premir _V ‘to press, oppress’ 2) > <i>pressa</i> ‘pressed’ → Port. pressa _{NF} ‘hurry, haste’ > a) depressa _{ADV} ‘quickly’ b) apressar _V ‘to rush, hurry, hasten’ PIE <i>*per-</i> > <i>*pr-</i> > <i>*pret-</i> > Lat. <i>pressus</i> ‘pressed, tightened’ → <i>*prettus</i> → Port. perto _{ADV} ‘near, close’
Polish words containing the same PIE root or one of its variants	PIE <i>*per-</i> > <i>*pr-</i> > PS <i>*p̥rati</i> ‘beat, trample, wash’ → Pol. prać _V ‘to wash, launder, beat’ (because of the ancient way of doing laundry by hitting clothes with a stick) PIE <i>*per-</i> > PS <i>*perun̥s</i> → Pol. piorun _{Nm} ‘thunderbolt, lightning’ (the one who hits, strikes)
references	DELP ₁ s.v. <i>preto</i> ² , s.v. <i>premer</i> , <i>premir</i> , s.v. <i>pressa</i> , s.v. <i>depressa</i> , s.v. <i>perto</i> DELP ₂ s.v. <i>preto</i> , s.v. <i>premer</i> , s.v. <i>pressa</i> , s.v. <i>perto</i> DCEĀH s.v. <i>prisa</i> DELL s.v. <i>premo</i> IEW: 818–819 LIV: 473 IEL: https://lrc.la.utexas.edu/lex/master/1494 EDSIL: 427–428 Boryś SEJP s.v. <i>prać</i> , s.v. <i>piorun</i> Snoj SES s.v. <i>prāti</i>
vermelho ‘red’	
1 st attestation	13 th century
etymology	PIE <i>*uer-</i> ‘to turn, bend, writhe’ > <i>*ur-</i> > <i>*urmi-</i> ‘worm, maggot’ → Lat. <i>uermis</i> ‘worm’ > <i>uermiculus</i> ‘small worm’ → Port. vermelho ‘red’
derivatives & compounds that refer to a colour	avermelhar _V ‘to turn red’, avermelhado _{ADJ} ‘reddish’, vermelhidão _{NF} ‘redness’

etymologically related words that do not refer to this colour	<p>PIE <i>*uer-</i> > <i>*ur-</i> > <i>*urmi-</i> 'worm, maggot' → Lat. <i>uermis</i> 'worm' → Port. verme_{Nm} 'worm'</p> <p>PIE <i>*uer-</i> > <i>*uert-</i> > Lat. <i>uertere</i> 'to turn':</p> <p>1) → Port. verter_v 'to pour'</p> <p>2) > <i>uersus</i> 'furrow, line, row, verse' → Port. verso_{Nm} 'verse'</p> <p>3) > <i>diuertere</i> 'to turn away, go away':</p> <p>a) → Port. divertir_v 'to amuse, entertain'</p> <p>b) > <i>diuersus</i> 'turned into opposite or different directions' → Port. diverso_{ADJ} 'diverse'</p> <p>4) > <i>aduertere</i> 'to turn towards' > <i>aduersus</i> 'turned towards' → Port. avesso_{ADJ} 'reverse'</p> <p>5) > <i>inuertere</i> 'to return, reverse' > <i>inuersus</i> 'reversed' > <i>*inuerse</i> → Port. invés_{Nm} 'opposite side'</p>
Polish words containing the same PIE root or one of its variants	<p>PIE <i>*uer-</i> > <i>*uerb-</i> > PS <i>*v̥rba</i> → Pol. wierzba_{Nf} 'willow' (because of slenderness of a willow's twigs)</p> <p>PIE <i>*uer-</i> > <i>*uerg-</i> → PS <i>*vergti</i> 'to throw' > <i>*v̥rgati</i> → wierzgać_v 'to kick, to suddenly move the legs'</p> <p>PIE <i>*uer-</i> > <i>*uerg^h-</i> 'to twist, bend, bind, tie' > PS <i>*po-verzti</i> 'to tie, bond' > <i>*poverslo</i> 'binder' → Pol. powrósto_{Nm} 'binder, wisp'</p> <p>PIE <i>*uer-</i> > <i>*uerk-</i> 'to twist, bind' > <i>*urenk-</i>_{Nm} 'to pick up, gather' > <i>*uronkah</i> → PS <i>*rōka</i> → Pol. ręka_{Nf} 'hand, arm'</p> <p>PIE <i>*uer-</i> > <i>*uerk^h-</i> 'to twist, bend, bind, tie' > PS <i>*versō</i> → Pol. wrzos_{Nm} 'heather' (heather was used for braiding different objects) > wrzesień_{Nm} 'September' (period when heathers are in blossom)</p> <p>PIE <i>*uer-</i> > <i>*uert-</i> 'to turn, twist' > <i>*uerteno-</i> → PS <i>*verteno</i> → Pol. wrzeciono_{Nm} 'spindle'</p>
references	<p>DELP₁ s.v. <i>vermelho</i>, s.v. <i>verme</i>, s.v. <i>verter</i>, s.v. <i>verso</i>, s.v. <i>divertir</i>, s.v. <i>diverso</i>, s.v. <i>avesso</i>, s.v. <i>invés</i></p> <p>DELP₂ s.v. <i>vermelho</i>, s.v. <i>verme</i>, s.v. <i>verter</i>, s.v. <i>verso</i>, s.v. <i>divertir</i>, s.v. <i>avesso</i></p> <p>HP: 324–326</p> <p>DCECH s.v. <i>bermejo</i>, s.v. <i>verter</i></p> <p>DELL s.v. <i>uermis</i>, s.v. <i>uerbēna</i>, s.v. <i>uerbera</i>, s.v. <i>uertō</i>, s.v. <i>uergō</i></p> <p>IEW: 1152–1160</p> <p>LIV: 688, 691–692</p> <p>IEL: https://lrc.la.utexas.edu/lex/master/2156, https://lrc.la.utexas.edu/lex/master/2157, https://lrc.la.utexas.edu/lex/master/2159, https://lrc.la.utexas.edu/lex/master/2160, https://lrc.la.utexas.edu/lex/master/2161, https://lrc.la.utexas.edu/lex/master/2163</p> <p>EDSIL: 439–440, 515–516</p> <p>Boryś SEJP s.v. <i>wierzba</i>, s.v. <i>wierzgać</i>, s.v. <i>powrósto</i>, s.v. <i>wrzos</i>, s.v. <i>wrzesień</i>, s.v. <i>ręka</i>, s.v. <i>wrzeciono</i></p> <p>Snoj SES s.v. <i>v̥rba</i>, s.v. <i>povréslo</i>, s.v. <i>vrzēl</i>, s.v. <i>résa²</i>, s.v. <i>rōka</i>, s.v. <i>vreténo</i></p>
roxo 'purple'	
1 st attestation	13 th century
etymology	PIE <i>*reud^h-</i> 'red' > <i>*rud^h-</i> > <i>*rud^hto-</i> / <i>*rud^hso-</i> → Lat. <i>russus</i> 'redhead, red' > <i>russeus</i> 'dark red' → Port. roxo 'purple'
derivatives & compounds that refer to a colour	arroxear _v 'to turn purple', arroxeado _{ADJ} 'purplish'
etymologically related words that do not refer to this colour	PIE <i>*reud^h-</i> > <i>*rud^h-</i> > <i>*rud^hro-</i> → Lat. <i>ruber</i> 'red' > <i>rubeus</i> 'red, ginger, rufous' → ruivo _{ADJ} 'redhead'

Polish words containing the same PIE root or one of its variants	<p>PIE <i>*reud^h-</i> > <i>*rud^h-</i> > <i>*rud^ho-</i> → PS <i>*r̥od̥</i> ‘red’ > <i>*r̥odja</i> ‘redness’ → Pol. <i>rdza</i>_{Nf} ‘rust’</p> <p>PIE <i>*reud^h-</i> > <i>*rud^h-</i> > <i>*rud^hro-</i> → PS <i>*r̥odr̥</i> ‘reddish, rufous, russet’ > <i>*r̥odr̥st̥</i> → Pol. <i>rdest</i>_{Nm} ‘knotweed, knotgrass, <i>Polygonum</i>’</p> <p>PIE <i>*reud^h-</i> > <i>*rouđ^h-</i> > <i>*rouđ^ho-</i> → PS <i>*rud̥</i> ‘red, reddish’:</p> <p>1) → Pol. <i>rudy</i>_{ADJ} ‘red, ginger, rufous’</p> <p>2) > <i>*ruda</i> ‘something red; red clay, earth’ → Pol. <i>ruda</i>_{Nf} ‘ore’</p> <p>PIE <i>*reud^h-</i> > <i>*rouđ^h-</i> > <i>*rouđ^hmōn-</i> → PS <i>*rum̥n̥</i> → Pol. <i>rumiany</i>_{ADJ} ‘ruddy, rufous’</p> <p>PIE <i>*reud^h-</i> > <i>*rouđ^h-</i> > <i>*rouđ^hso-</i> → PS <i>*rus̥</i> ‘reddish, ginger’ → Old Pol. <i>rusy</i>_{ADJ} ‘ginger, rufous’</p> <p>PIE <i>*reud^h-</i> > <i>*rūd^h-</i> > PS <i>*ryđj̥</i> ‘red-yellow, bright rufous’ → Pol. <i>rydz</i>_{Nm} ‘red pine mushroom, <i>Lactarius deliciosus</i>’</p>
references	<p>DELP₁ s.v. <i>roxo</i>, s.v. <i>ruivo</i></p> <p>DELP₂ s.v. <i>roxo</i>, s.v. <i>ruivo</i></p> <p>HP: 255–256</p> <p>Silvestre, Villalva & Pacheco 2014</p> <p>DCECH s.v. <i>rojo</i>, s.v. <i>rubio</i></p> <p>DELL s.v. <i>rūssus</i>, s.v. 1^o <i>ruber</i>, s.v. 2^o <i>rubeō</i>, s.v. <i>rūfus</i>, s.v. <i>rōbus</i>, s.v. <i>rōbur</i></p> <p>IEW: 872–873</p> <p>LIV: 508–509</p> <p>IEL: https://lrc.la.utexas.edu/lex/master/1631</p> <p>EDSIL: 440</p> <p>Boryś SEJP s.v. <i>rudy</i>, s.v. <i>ruda</i>, s.v. <i>rdza</i>, s.v. <i>rdest</i>, s.v. <i>rydz</i>, s.v. <i>rumiany</i>, s.v. <i>ryzy</i></p> <p>Snoj SES s.v. <i>rděti</i>, s.v. <i>rúda</i>, s.v. <i>rjä</i>, s.v. <i>rum̥n̥</i>, s.v. <i>rūs</i></p>

Quite surprisingly, the PIE root **reud^h-* is well preserved both in Portuguese and in Polish, where it continues its original meaning in adjectives naming similar colours (purple and rufous), but also in various objects and plants whose characteristic feature is that of being of one of these colours. The other two roots are present in Portuguese colour names through a metaphor (*preto*) and a metonymy (*vermelho*); it is curious that an identical metonymy (‘maggot producing red dye’ > ‘red colour’) stands behind the Portuguese and Polish names of the colour red, even if these names are not akin. Moreover, Polish and Portuguese vocabularies comprise many words that continue, more or less directly, the primitive significations of roots **per-* and **uer-*.

Polish and Portuguese ‘white’

We have found just one PIE root that refers to the same colour in Polish and Portuguese. Its original meaning of ‘shiny, white’ is preserved in both languages,

though the phonetic output does not immediately reveal their etymological closeness (cf. *biały* vs. *branco*).

	<i>biały</i> ‘white’	<i>branco</i> ‘white’
1 st attestation	15 th century	13 th century
etymology	PIE <i>*b^helH-</i> > <i>*b^hēlH-</i> > <i>*b^hēlHo-</i> → PS <i>*b^hēl^h</i> ‘white, bright’ → Pol. <i>biały</i> ‘white’	PIE <i>*b^helH-</i> > <i>*b^hl-</i> > <i>*b^hleg-</i> / <i>*b^hleǵ-</i> ‘to shine’ > Germanic <i>*blank</i> ‘bright, shiny’ → Port. <i>branco</i> ‘white’
derivatives & compounds that refer to a colour	<i>biel</i> _{Nf} ‘white’, <i>bielić</i> _V ‘to whiten, bleach’, <i>biało</i> _{Adv} ‘whitely’, <i>bielmo</i> _{Nn} ‘endosperm; leukoma’, <i>białko</i> _{Nn} ‘albumen; protein’	<i>branquear</i> _V ‘to whiten’, <i>branqueamento</i> _{Nm} ‘whitening’, <i>esbranquiçar</i> _V ‘to become whitish’, <i>esbranquiçado</i> _{Adj} ‘whitish’
etymologically related words that do not refer to this colour	PIE <i>*b^helH-</i> > <i>*b^holH-</i> > <i>*b^holHnā-</i> → PS <i>*bolna</i> ‘membrane, sapwood’ → Pol. <i>blona</i> _{Nf} ‘membrane, film’ (sapwood is usually light-coloured) PIE <i>*b^helH-</i> > <i>*b^holH-</i> > <i>*b^holHnio-</i> → PS <i>*bolnjsje</i> ‘wet meadow, clearing’ → Pol. <i>blonie</i> _{Nn} ‘large pasture, meadow’ (whitish area, maybe due to the bright colour of the clay or because of being covered by cotton grass – <i>Eriophorum</i>) PIE <i>*b^helH-</i> > <i>*b^hōlH-</i> > <i>*b^hōlto-</i> → PS <i>*bolto</i> ‘swamp’ → Pol. <i>bloto</i> _{Nn} ‘mud’ (the same motivation as in <i>blonie</i>)	PIE <i>*b^helH-</i> > <i>*b^hl-</i> > <i>*b^hleg-</i> / <i>*b^hleǵ-</i> ‘to shine’ > Lat. (? <i>*flagma</i> →) <i>flamma</i> → Port. <i>chama</i> _{Nf} ‘flame’ PIE <i>*b^helH-</i> > <i>*b^hl-</i> > <i>*b^hlg-</i> / <i>*b^hlǵ-</i> ‘to shine’ > Lat. <i>fulgēre</i> / <i>fulgēre</i> → Port. <i>fulgir</i> _V ‘to blaze, glisten, glow, shine’
references	Boryś SEJP s.v. <i>biały</i> , s.v. <i>blona</i> , s.v. <i>blonie</i> , s.v. <i>bloto</i> Snoj SES s.v. <i>bél</i> , s.v. <i>bláto</i> EDSIL: 40, 52–54 DELP ₁ s.v. <i>branco</i> , s.v. <i>chama</i> , s.v. <i>fulgir</i> DELP ₂ s.v. <i>branco</i> , s.v. <i>chama</i> , s.v. <i>fulgir</i> HP: 60 DCECH s.v. <i>blanco</i> , s.v. <i>llama I</i> DELL s.v. <i>fulgō</i> , s.v. <i>fulix</i> IEW: 118–120, 124–125 LIV: 86 IEL: https://lrc.la.utexas.edu/lex/master/o214	

The same root (in different variants and by different paths) has given the name of the colour white in both languages; the metaphor was the idea of brightness. It is also present in some other words: in Polish they are motivated by the colour, whereas in Portuguese by the idea of shining.

Summary and outlook

The knowledge of Indo-European colour names is not as straightforward as would be considered. According to PIE Lexicon drawn from Julius Pokorny’s

Indogermanisches etymologisches Wörterbuch (IEL: <https://lrc.la.utexas.edu/lex/semantic/field/SP>), the set of colours lexically represented in PIE comprises white, black, red, blue, green and yellow, and a generic category for light colours as well as another one for dark colours, but each of these colour categories is associated to several roots.

It is, thus, to be expected to find diverging selections having been made by different languages, especially if they belong to different sub-families, which is the case of Polish and Portuguese. The data that we have analysed is of a very limited dimension, but it allows us to document different paths. Some colour names correspond to the evolution of PIE colour names – ‘white’ is our best example, since the same IE root yields the Polish and the Portuguese equivalents.

It is interesting to note that some Polish and Portuguese words, somehow related to ‘white’, derive from PIE roots that meant ‘white’:

IE root	Polish	Portuguese
*alb ^h o- ‘white, albino’	<i>labędź</i> _{Nm} ‘swan’	<i>alvo</i> _{ADJ} ‘white, clean’
*ar(e)ǵ- ‘white, argent, glittering’	NONE	<i>argila</i> _{Nf} ‘clay’, <i>argêteo</i> _{ADJ} ‘silvery’ (borrowings)
*b ^h elH- ‘glittering white’	<i>biały</i> _{ADJ} ‘white’	<i>branco</i> _{ADJ} ‘white’
*b ^h erhǵ- ‘to shine; bright, white’	<i>brzoza</i> _{Nf} ‘birch’	<i>freixo</i> _{Nm} ‘ash (tree)’
*kás- ‘grey’	NONE	<i>cãs</i> _{NPl} ‘white hair’

In the case of red, the central IE root (i.e. *reud^h-*) has provided colour words both in Polish and Portuguese, but they are not the basic terms for red in any of these languages. Curiously, both languages adopted a similar metonymical procedure: they selected different IE roots meaning ‘worm’ as a basis to the words meaning ‘red’:

IE root	Polish	Portuguese
*reud ^h - ‘red’	<i>rudy</i> _{ADJ} ‘red, ginger, rufous’	<i>roxo</i> _{ADJ} ‘purple’
*k ₂ urmi- ‘grub, worm, maggot’	<i>czernony</i> _{ADJ} ‘red’	NONE
*uer- ‘to turn, bend, writhe’ > *urmi- ‘worm, maggot’	see above	<i>vermelho</i> _{ADJ} ‘red’

Polish words for ‘black’ and ‘grey’ proceed from IE colour roots. These roots have not yielded colour names in Portuguese, but one of the semantically equivalent IE colour roots has provided words in Portuguese and Polish that somehow relate to those colours by referring to ‘darkness’.

IE root	Polish	Portuguese
* <i>kers-</i> ‘black, dirty; dark colour’	<i>czarny</i> _{ADJ} ‘black’	NONE
* <i>kei(h)₁-</i> ‘dark colour: brown, grey’	<i>szary</i> _{ADJ} ‘grey’	NONE
* <i>temH-</i> ‘dark’	<i>ciemny</i> _{ADJ} ‘dark’, <i>ćma</i> _{NF} ‘moth’	<i>trevas</i> _{NEPL} ‘darkness’

Neither Polish nor Portuguese have preserved any of the IE roots for ‘green’⁸ or for ‘yellow’⁹: Polish adopted two related roots that referred to bright colours and, based on them, developed two divergent forms for ‘yellow’ and ‘green’. Portuguese took a metaphoric option for ‘green’ (the colour of a sprout) and also for ‘yellow’ (the colour of bitter).

IE root	Polish	Portuguese
* <i>ǵ^helh₃-</i> ‘to shine, glow; gold, yellow, bright colour’	<i>zielony</i> _{ADJ} ‘green’	NONE
* <i>g^helh₃-</i> ‘to shine, glow; gold, yellow, bright colour’	<i>żółty</i> _{ADJ} ‘yellow’	see above
* <i>ueis-</i> ‘to grow, sprout’	NONE	<i>verde</i> _{ADJ} ‘green’
* <i>om-</i> ‘raw, coarse, bitter’	NONE	<i>amarelo</i> _{ADJ} ‘yellow’

Finally, let it be mentioned that Pokorny lists three roots that could refer to the colour blue, but none of them having been conserved either in Polish or in Portuguese as the basic name of this colour – Polish utilises the derivative *niebieski*, while in Portuguese the Arabism *azul* is used. Nevertheless, they have left some words somehow related to this colour:

⁸ Pokorny lists the following: **d^halh₁-* ‘to bloom, be green’; **g^hrē-/g^hrō-/g^hrə-* ‘to grow, become green’; **iālo-* ‘raw, unripe’; **kēko-* ‘green grass, fodder’.

⁹ Pokorny lists the following: **badīo-* ‘bay, brown; gold, yellow’; **b^hlend^h-* ‘dim, pale, blond, reddish’; **b^hlēuo-* ‘a light colour (blue, yellow)’; **k_εnəkó-* ‘golden, honey-coloured’.

IE root	Polish	Portuguese
<i>b^hl̥eǵo-</i> ‘a light colour (blue, yellow)’	NONE	<i>flavo</i> _{ADJ} ‘golden, yellow, fawn’ (borrowing)
* <i>mod^hro-</i> ‘blue; madder’	<i>modry</i> _{ADJ} ‘deep blue’	NONE
*(s)l̥i- ‘livid, bluish’	<i>śliwa</i> _{Nf} ‘plum tree’, <i>śliwka</i> _{Nf} ‘plum’	<i>livido</i> _{ADJ} ‘livid’ (borrowing)

A general conclusion resulting from our material is that it is interesting to see the semantic evolution of PIE roots and their presence in both languages. It turns out that some names of colours come from a basis that denoted some undefined hues, simply bright (Pol. *biały* and Port. *branco* ‘white’, Pol. *zielony* ‘green’, *żółty* ‘yellow’) or dark ones (Pol. *czarny* ‘black’, *szary* ‘grey’). However, other PIE roots, that have nothing to do with colours, are also present and allowed us to discover some curious metaphors and metonymies that have occurred during their development (Port. *preto* ‘black’, *verde* ‘green’, *amarelo* ‘yellow’). In one case, there is a semantic parallel in the independent development: even if the origin of the adjectives for ‘red’ is not the same (Pol. *czerwony* and Port. *vermelho*), the metonymy ‘maggot producing red dye’ > ‘red dye, red colour’ is the same both in Polish (and generally Slavic) and Portuguese (and generally Ibero-Romance) languages. This can be a sign of a common cultural past: it is possible that insects and their larvae were used for the production of red dye on a scale larger than a regional one.

Comparing both languages, as far as names of colours are concerned, we can tell that Polish is more conservative, while Portuguese has more innovative, metaphorically based denominations. Nevertheless, both still show traces of a common remote past.

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