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The *Atlas Linguarum Europae* as an Instrument for Eurolinguistic Research

Abstract

Using various illustrations as examples, the article gives an overview of the Eurolinguistic fields of interest which can benefit from the *Atlas Linguarum Europae*: loanword research (illustrated by words for 'ink' and 'potato'), etymological research and the implications for ethnolinguistic research (illustrated by words for 'grave') and motivational research (and its connection to various prehistoric and historic lexical layers) as well as, to a limited degree, typological research.

Sommaire

A l'aide des illustrations exemplaires, l'article donne un aperçu des domaines de recherche eurolinguistique qui pourraient bénéficier de l'*Atlas Linguarum Europae*: la recherche d'emprunts (illustrée par les mots pour 'encre' et 'pomme de terre'), la recherche étymologique et ses implications pour la recherche ethnolinguistique (illustrée par les mots pour 'tombe') et la recherche motivationelle (et sa connection avec de diverses couches préhistoriques et historiques), et, à un degré limité, la recherche typologique.

Zusammenfassung

Anhand verschiedener beispielhafter Darstellungen gibt der Artikel einen Überblick über die eurolinguistischen Interessensgebiete, die vom *Atlas Linguarum Europae* profitieren können: die Lehnwortforschung (veranschaulicht an den Wörtern für 'Tinte' und 'Kartoffel'), etymologische Forschung und ihre Implikationen für ethnolinguistische Forschung (veranschaulicht an den Wörtern für 'Grab') und Forschung zu Bezeichnungsmotiven (und ihre Verbindung zu verschiedenen prähistorischen und historischen Wortschatzschichten) sowie, in eingeschränktem Maße, typologische Forschung.

1. Introductory Remarks

Bernardino Biondelli (1804-1886), today at least half forgotten, was in many ways an original scholar — also in the area of linguistic geography. Four decades before Jules Gilliéron published his *Petit Atlas Phonétique du Valais Roman* (1881), which comprised some 25 localities and 36 regional maps, and fully sixty years before Gustav Weigand and, once more, Jules Gilliéron brought out their larger operations of this kind, Biondelli presented fascicle 1 of his programmatically challenging *Atlante Linguistico d'Europa* in 1841. The issues discussed were, according to the subtitle, "Nozioni preliminari, classificazione, carattere e regno delle lingue indoeuropee". With the pan-European project, the *Atlas Linguarum Europae* (ALE), Biondelli's far-sighted anticipation of such dreams and his spadework on behalf of cartographic projections of linguistic facts on a European scale seem all the more remarkable.

His map "Prospetto topografico delle lingue parlate in Europa" is interesting from a historical perspective. When it appeared in 1841, historico-comparative linguistics had already made

some progress, but its greatest achievements were still to come in the second half of the nineteenth century. Biondelli's map was, of course, constructed according to the knowledge of the time and it is thus not surprising that it shows a number of terminological and factual inaccuracies. In the 20th century, the idea of a European linguistic atlas was first advocated by Wilhelm Pessler in 1929 in the area of word geography. The phonologists followed only a few years later with Roman Jakobson's project presented at the congress of linguists in Copenhague in 1936. The Second World War, however, put an end to these projects. After the war Emil Petrovici and Manual de Paiva Boléo were among the first to support the realisation of a European linguistic atlas.[1]

Several years later Mario Alinei had the plan to analyse Indo-European phonemes on a European scale, whereas Antonius A. Weijnen was the first to envisage an interlingual, comparative map and then an interlingual, comparative atlas. Weijnen was thus the founder of the ALE in 1970, whose first president he was.

The ALE map "Carte de distribution des familles et des groupes linguistiques" gives an accurate description of Europe's linguistic situation. It can easily be consulted in the project's publications, whose latest fascicle, fascicle 7, appeared fairly recently (Viereck 2007/2008). The ALE map distinguishes between six language families: Altaic, Basque, Caucasian, Indo-European, Semitic and Uralic. In these language families, 22 language groups in total can be counted, namely

- Altaic (2): Mongolian and Turk languages;
- Basque (1);
- Caucasian (2): Abkhazo-Adyge and Nakho-Dagestanian;
- Indo-European (10): Albanian, Armenian, Baltic, Germanic, Greek, Iranian, Celtic, Romance, Romany and Slavic;
- Semitic (1): Arabic (Maltese);
- Uralic (6): Finnish, Lappish, Permic, Samoyed, Ugric and Volgaic.

These, in turn, consist of many individual languages. It thus becomes apparent that the demands on scholars to interpret the heterogeneous data collected in 2,631 localities from Iceland to the Ural mountains are very high indeed.

The ALE can be called a linguistic atlas of the fourth generation, being preceded by regional and national atlases as well as by atlases of language groups. Atlases of the fifth type, i.e. on entire language families such as Indo-European, or of the final type, namely a world linguistic atlas, do not exist as yet, although interesting work has fairly recently been made available with *The World Atlas of Language Structures* (Dryer et al. 2005). The ALE is the first continental linguistic atlas. Its frontiers are neither political nor linguistic but simply geographic. The choice of the continent has nothing to do with Eurocentrism but only follows from the present state of research. Unfortunately, the ALE net is not uniform. Different countries collected materials in different ways, using new fieldwork, published sources, such as existing national linguistic atlases or dictionaries and unpublished archives. While this is perhaps the only way in which such a large-scale project could have been carried out in practice, one must lament the loss of synchrony due to the chronological discrepancies involved in such a procedure.

It is always the oldest vernacular words that are looked for in the various languages. These are then put on symbol maps and interpreted either synchronically or diachronically as the cases require. According to Alinei (1983: XXII-XXIII)

[1] Cf. the historical account by Weijnen (1975: 166).

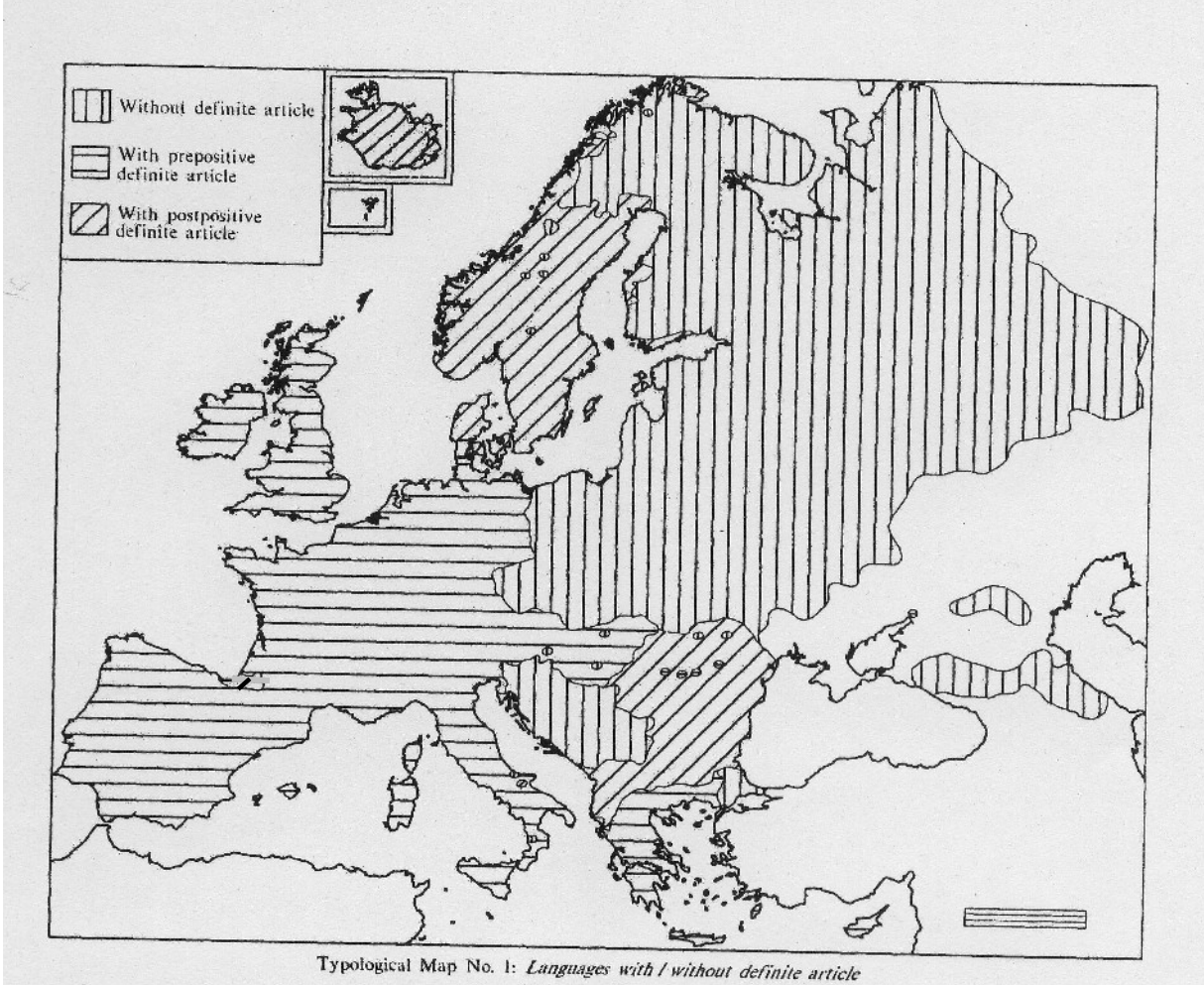
> "there is little chance of a serious breakthrough in historical and geographic linguistics unless different language groups and families are studied simultaneously in their mutual relationships and on the basis of one of their most important parameters, namely their *dialect* continuum in historical and modern times. *Dialects*, and not only *languages,* since any comparative study of standard languages […] by neglecting dialects, necessarily gives only a partial and incomplete reconstruction of the linguistic continuum; *modern* dialects, and not only *ancient* languages, as is traditional in Indo-European studies, for it is possible that modern dialects preserve more archaic features than the most archaic written documents [...]."

Until now commentaries of 62 notions and 84 computer-produced multi-colour maps have been published, large-format productions (74 cm x 60 cm), each with an accompanying sheet of equal dimension explaining the various symbols employed. The objective here has been to create a symbology indicating conceptual congruity across language(-family) boundaries.

2. Presentation of a Typological Map

The ALE is, primarily, an interpretative word atlas. Typological maps are few in number. They deal with the presence vs. absence of the definite article, the position of the adjective with regard to the noun or with the obligatory vs. free use of subject pronouns.

As to the definite article, Europe is divided roughly into two areas (see Map 1): The western area shows the article and the eastern area does not. More specifically, the whole Slavic area with the exception of Bulgarian and Macedonian, the whole Uralic area except for Hungarian and the Altaic and Caucasian areas do not have the definite article. Within the area where the article does appear, there is an additional opposition between pre- and postposition of the definite article. Basque differs from the surrounding prepositive Romance areas; but within the Indo-European area itself not only the Scandinavian area (Danish [with the exception of the Danish dialects of West and South Jutland that use a prepositive definite article], Norwegian, Swedish, Faroese and Icelandic), but also a compact area formed by Albanian, Romanian (the only Romance area with postposition), Bulgarian and Macedonian (the only Slavic areas with the definite article) have postposition. The picture is thus contradictory: for, on the one hand, postposition of the definite article isolates the Scandinavian area from its common Germanic ancestry; on the other hand, it contributes to unifying, despite their different origin, all Balcanic groups: Romanian of Romance origin, Bulgarian and Macedonian of Slavic origin, and Albanian of Illyric origin. This feature is one of the many on the basis of which the Balcan linguistic area forms a *Sprachbund.* The distributional area shows that the formation of the definite article is more recent than that of genetic branchings (Alinei 1997a: 33, with several corrections and additions).



Typological Map No. 1: *Languages with / without definite article*

Map 1

Generally speaking, the areal distribution of typological features does not seem to correspond to that of genetic features within the framework of language families or language groups.

The interpretation of word maps follows different lines. Three aspects are important in this connection: loanword research, etymological research going back to prehistoric times and the study of motivations in designating certain objects.

3. Loanword Research

Loanwords usually belong to the historical period, as they are connected with technology, culture and commerce. The ALE has important contributions to its credit in this area. Generally speaking, there are no problems with etymology. One such example is the expressions provided for the notion *ink.* A commentary on *ink* has not yet been published within the ALE framework. In ancient times black ink was mostly produced with lampblack. In the 3rd century A.D., a mixture of soluble iron salt with tannic acid, often extracted from oak bark, came into use. This type of ink spread among the tribes of Europe. Therefore the word for 'ink' in present-day Germanic languages is identical with 'black ink', cf. German *schwarz wie Tinte* ('black as ink') or *schwarz auf weiß* ('black on white [paper]') or English *atramentous* 'black as ink'. The same is true of the most widely diffused expressions for 'ink' in the Slavic area, such as Russian *černila,* Polish *czernidło,* Czech *černidlo* and Sorbian

čornidło. They all go back to a Proto-Slavic root **čъrnidlo* meaning 'black colour, ink'. The words for ink in Finnish, Ingrian, Votic, Karelian, Mordvin, Lappish, Permic and Samoyed *tšernila* are all loans from Russian *černila.* Also Irish *dubh* goes back to Old Irish *dub* 'black'. In addition to this most widespread colour, there were and there are also inks of different colours.

In the southern Germanic area and in the British Isles, the use of ink goes back to the contact with the Romans during the first centuries A.D. Ink came to Scandinavia from the British Isles. Attestations written with ink in the Runic alphabet have come down to us from the 13th and 14th centuries.

According to the *Oxford English Dictionary* (1989) black is "a word of difficult history". Frings (1966: 158) assumes that Old English *blæc, blac* was a translation of Latin *atramentum* 'ink', derived from Latin *ater* 'black'. Old English *blæc, blac* came to Scandinavia from the British Isles with the introduction of Christianity. Whereas *black* meaning 'ink' is obsolete in English today (cf. *Oxford English Dictionary* 1989, s.v. *black*, sb. 2a), all the Scandinavian languages have retained it with this meaning (cf. Swedish *bläck,* Icelandic *blek,* Danish *blæc,* Norwegian and Faroese *blekk*). Finnish *(b)läkki* is a loan from Swedish and Lappish *blækka* is a loan from Swedish/Norwegian.

The loans from Latin *atramentum (librarium)* are, of course, not restricted to the west and north Germanic area. They appear in direct form in Belorussian, Ukrainian, Czech, Slovak, Polish *atrament* and Lithuanian *(a)tramentas.* The loan process started from Polish.

In the German-speaking area *Tinte* (with variants) dominates, going back to Latin *tincta (aqua)* 'coloured (water)'. The word must have been borrowed after the second or High German consonant shift. *Tinte* predominated over the words going back to Latin *atramentum* as well as to Latin *encaustum.* From German, *Tinte* spread to a number of languages such as Polish (*tint[a]*), Lithuanian (*tinta*), Latvian (*tinte*), Estonian (*tint*), Livonian (*tint*) and Slovene (*tinta*). The Ukrainian form *tinta* could also have been borrowed from Hungarian *tinta*. This is a direct loan from Latin, as is the case with Spanish and Catalan, Portuguese and Italian *tinta*.

In the western Germanic area, in parts of the Romance and the Slavic areas, words succeeded that go back to Late Latin *encau(s)tum* which, in turn, derives from Greek *ἐγχαυστόν.* Originally, this term denoted purple ink, used by the Roman emperors for signing documents. From there the general meaning 'ink' developed as we find it today in French *encre*, Italian *inchiostro*, Friulian *ingiustri*, Polish *inkaust*, Czech *inkoust*, English *ink*, Dutch *inkt* and Rheno-Westphalian dialectal forms. According to De Vries (1971) Latin *encautum* was adopted in the Rhineland when Roman emperors resided in Trier (Augusta Treverorum), the oldest city in Germany. From there it spread into Old Dutch, Old Low German and northern Old French, attested there as *enque* (11th century). *Enque* became Middle English *enke* (first attested in 1250) and Modern English *ink*. In the Old French form, the Greek accent was retained in this Latin loan, while Italian *inchiostro* and Old Occitan *encaut* follow the Latin stress pattern.

Another interesting loanword example is *potato*. Originally, *potato* referred to the plant *Batatas edulis*, having tuberous roots, now distinguished as *sweet* or *Spanish potato.* The first attestation in English for the tuber is 1555. Somewhat later it also referred to the *Solanum tuberosum*, again to both the plant and the tuber. In 17th-century attestations of the word it is often impossible to determine which plant is meant. While the native region of the first-

mentioned plant is unknown—it is cultivated for food in most tropical and sub-tropical regions of the world – the tuber of the *Solanum tuberosum,* the common potato, belonged to the important food crops in the Andean highlands. It is believed that Spanish sailors introduced the common potato into Spain and Portugal, according to the *Oxford English Dictionary* (1989), "soon after 1580, and thence, c. 1585, into Italy" (s.v. *potato*, 2.a). From there potatoes were taken to Austria, Germany, Switzerland, the Netherlands, and to France.

How the potatoes came to England is difficult to say. They may have been introduced from Spain or may have reached England independently. From there they soon found their way to Ireland. John Gerard (1597) refers to potatoes growing in England in 1596, but he was wrong in stating that he had obtained them from Virginia, whence the name *Virginia potatoes* comes (first attested in 1597). No Indians were cultivating potatoes at that time. Rather, they were carried to the New World by early English, Irish and Scottish colonists, probably ignorant of their New World origin. Hence *Irish potato* is still used in Southern American English to distinguish the common potato from the sweet potato.

Potatoes as nourishment for the people were first used in Europe on a large scale in Ireland. Between 1845 and 1849 the potato blight led to a disastrous famine and forced very many Irish to leave the country in the second half of the 19th century. As the legend and Map 2 show, they also settled in England, mostly around Liverpool, where Anglo-Irish *praties* was still well attested in the mid-20th century. Originally, Irish *préata, práta, fáta* are loans from English *potato* that the Irish later reimported into England as *pratie(s).* Another allusion to the Irish must be seen in *murphies*, due to its rare occurrence in England not mapped by Viereck/ Ramisch (1991). *Murphy* is today a common family name in England, the density of which, however, is greatest in the historical Lancashire area. With the county reform of 1974 this large county was divided into several smaller units. Next in *Murphy*-density is London. Map 3 reveals an especially strong correlation of both areas with Irish immigration. In Lancashire it was possible to prove linguistically even one century later that many Irish immigrants found work there. Half a century earlier Wright (1898-1905) had attested *murphy* for a much greater area in England in his *English Dialect Dictionary*. Onions' (1966) *Oxford Dictionary of English Etymology* notes "from the common Irish surname Murphy, with allusion to the potato being a staple article of food of the Irish peasant" (s.v. *murphy*). In Ireland the surname *Murphy* had, of course, nothing to do with potato, but derived from Irish *Ó Murchadha* 'descendant of *Murchadh* 'warrior at sea' (Irish *muir* 'sea' and *chadh* 'warrior'). The third strongest concentration of *Murphy* today is in Lanarkshire in Scotland. The industrialised area in and around the third largest city in Great Britain, Glasgow, attracted many Irish looking for work, which they apparently also found there. As was to be expected, the 1881 Census results already showed the three concentrations of *Murphy* in the United Kingdom quite clearly.

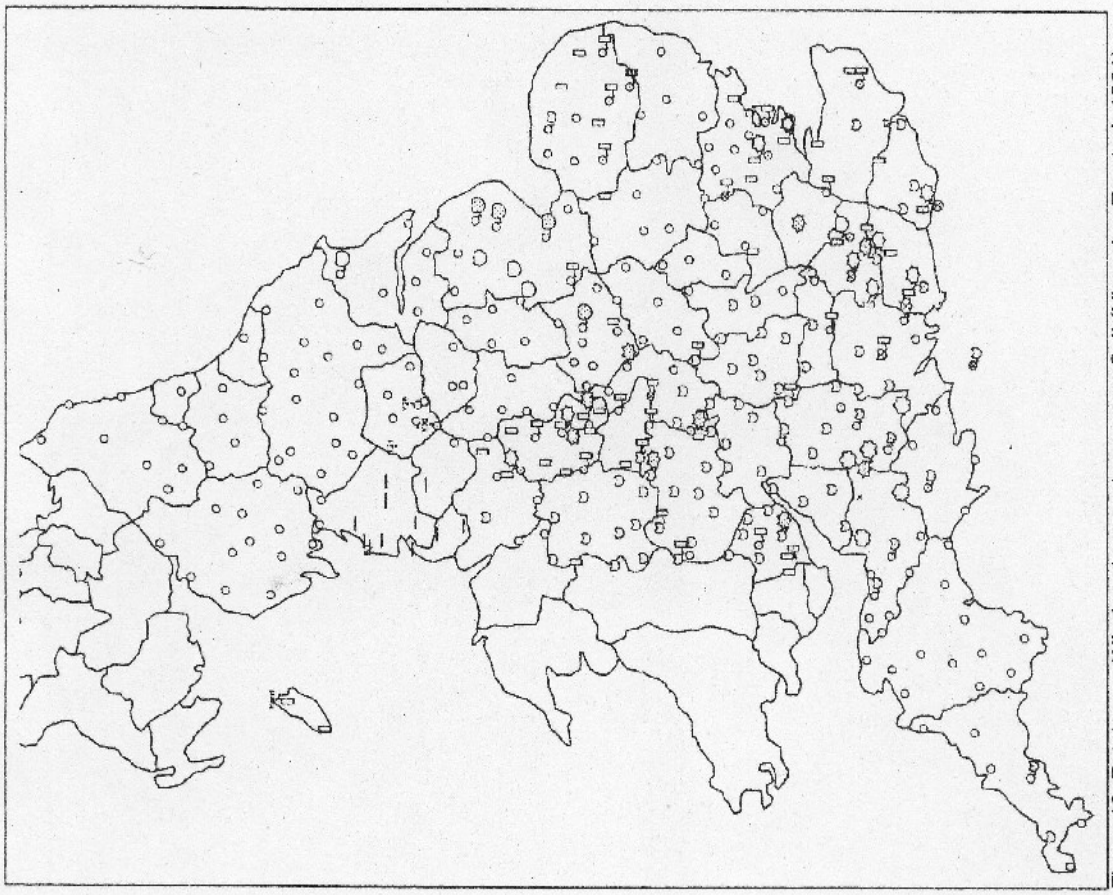
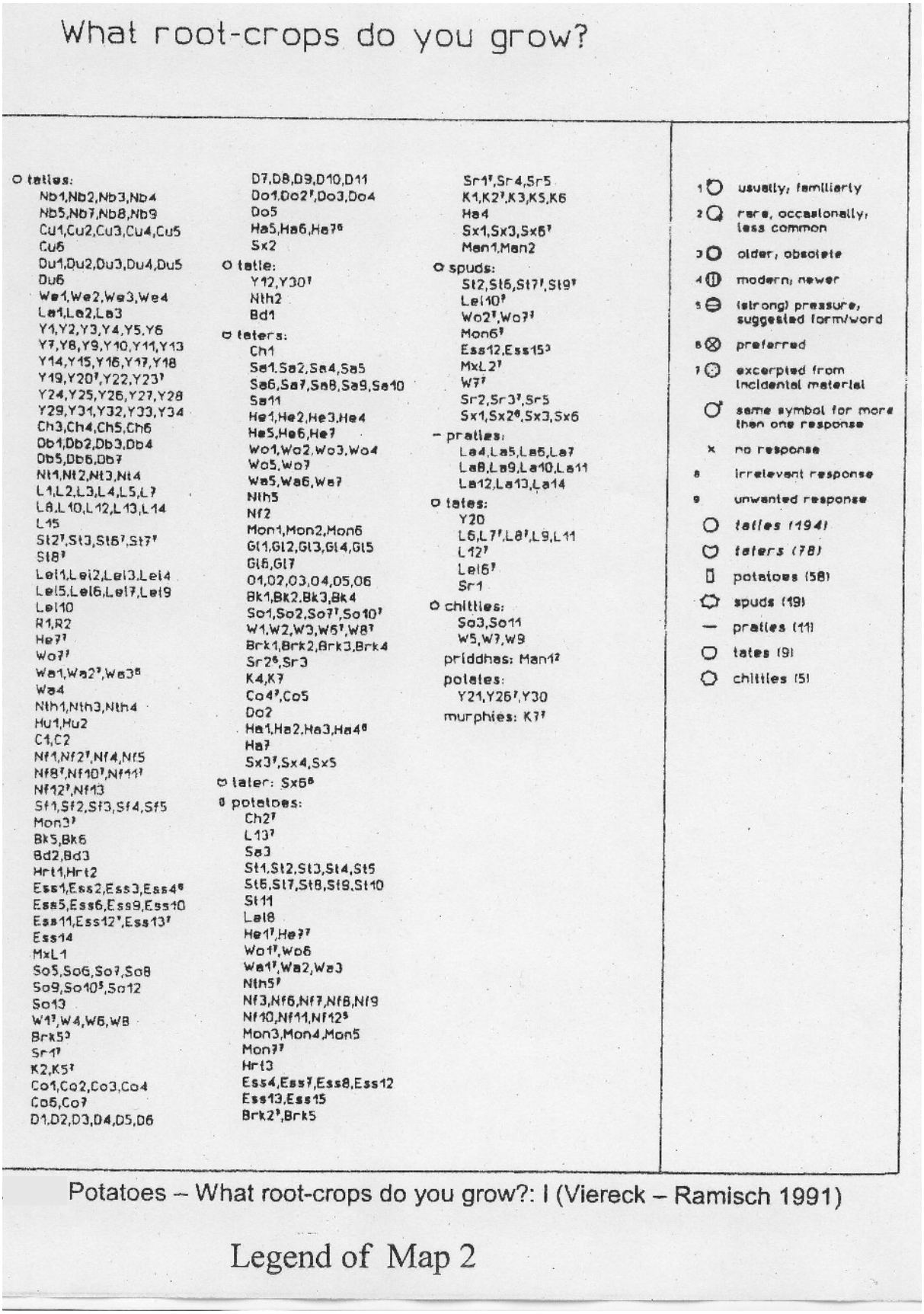


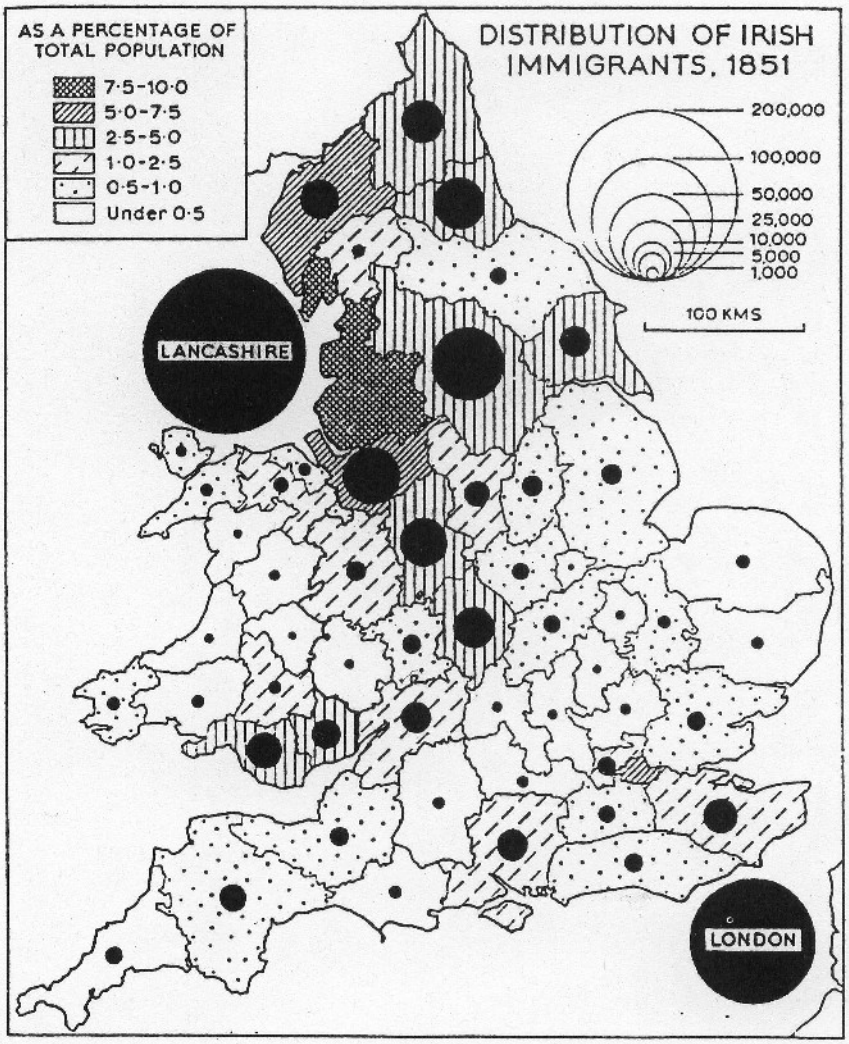
Figure 10. Potatoes – What root-crops do you grow?: II (Viereck – Ramisch 1991)

Map 2



Potatoes – What root-crops do you grow?: I (Viereck – Ramisch 1991)

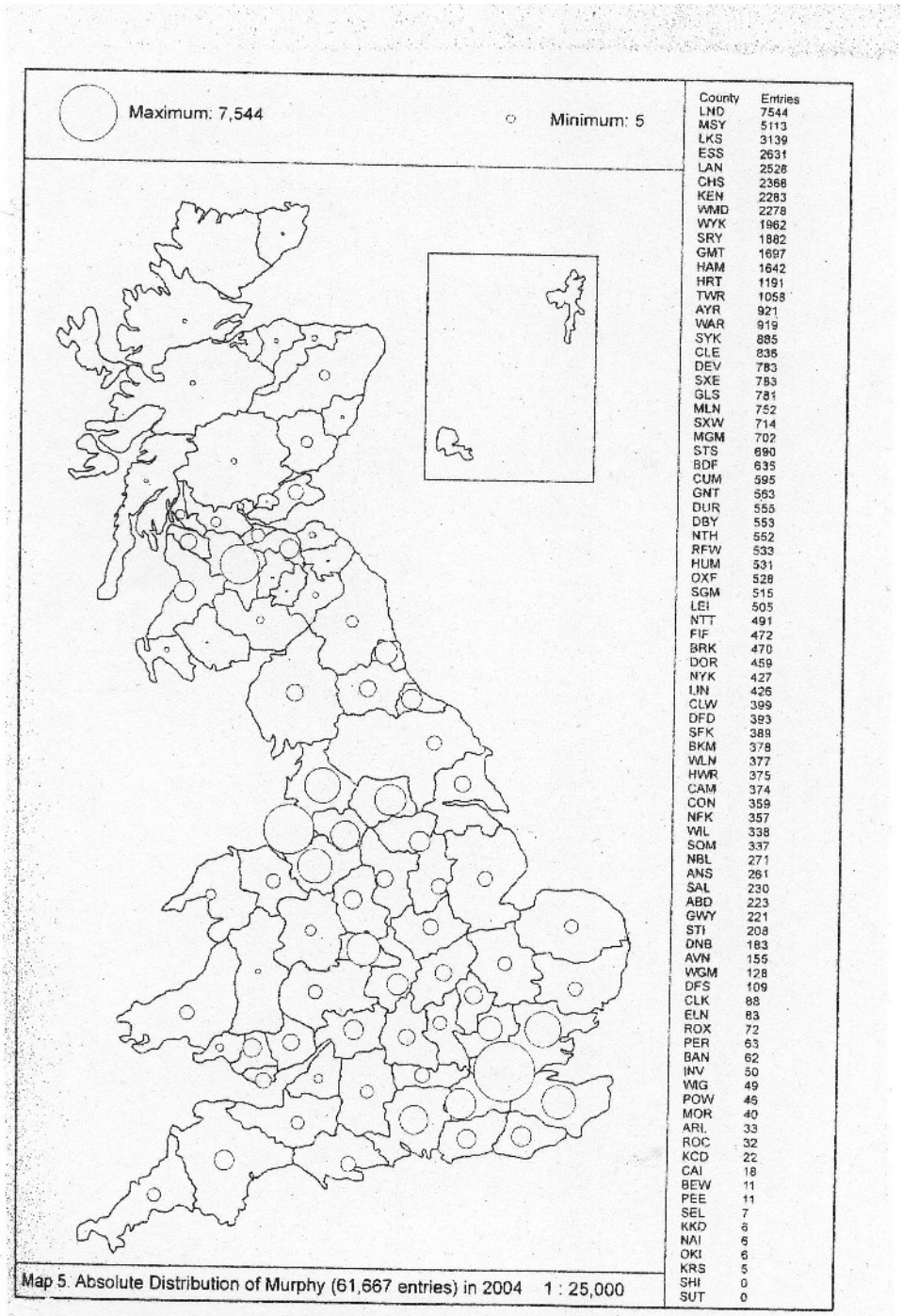
Legend of Map 2



Distribution of Irish immigrants, 1851
Based on *Census of 1851: Population Tables, II,* vol. 1, pp. ccxc-ccxcvi (P.P. 1852-3, lxxxviii, pt 1).

(Harris 1976: 171)

Map 3



Map 4

English *potato* goes back to Spanish *patata, batata* and ultimately to the now extinct Tainos language of Haiti (Martin 1963). It is equally attested in Swedish *potat(a), potät(a)*, Norwegian *potet(e),* Danish *potet*, *patet* and Dutch *petat, patat.* Much more often than the full form *potatoes,* the form with the omission of the first unstressed syllable occurs in England, mainly as *taties.* The same tendency is also at work in other languages, as in Norwegian *tetes*. In English *taters* an unetymological *r* developed in regions in which the pronunciation of a postvocalic *r* was generally preserved in the dialects, the so-called rhotic areas, while *tates* comes from a non-rhotic area in England. It is highly likely that *chitties* is a form of *(po)tatoes/taties* with affriction of the initial *t-*. It is undoubtedly related to *chat* noted in the

Oxford English Dictionary (1989) as dialectal, meaning 'a small poor potato' (s.v. *chat*, sb.4). An etymology is not offered here. Equally unclear is the etymology of *spud*. According to the *Oxford Dictionary of English Etymology* (Onions 1966) it means 'spade-like implement for digging or weeding' (attested in the 17th century) and 'potato' (first attested in 1845) (s.v. *spud*). It is to be assumed that here the designation of the implement was later transferred to the product dug out with it.

Finally, *priddhas*, like *praties*, is due to language contact, this time with Gaelic that was spoken on the Isle of Man (Manx *priddyryn*, pl.).

Given the wide-spread use of the potato in the European eating culture, it is surprising to note that it has no name of its own in the Germanic languages to which I restrict myself here. As mentioned above, *potato* (and related terms) originally referred to a different plant. This 'no name of its own' is even more obvious when the many designations are taken into account that go back to Italian *tartufolo*, meaning 'truffle'. To these belong, for example, earlier, i.e. late 16th century, German *Tartuffel*, now *Kartoffel,* Frisian *kantüffel, kartüffel,* Icelandic *kartafla*, Danish *kartoffel, kartøffel,* and Norwegian *kantoffel*. Here, again, the first unstressed syllable may be omitted, as in German *Tyft, Tofels,* Norwegian *toflar*, Danish *tøffelken* and Frisian *tuwwelke.*

Apart from the potato and the tartufolo groups quite a number of terms exist for the potato that are in actual fact descriptions of the tuber, motivated by a comparison with the fruit of much older well-known plants:

- with *apple* as a simplex or as a second element of a compound: Swedish *äpple, jordäpple,* Norwegian *eple, jordeple,* Dutch *aardapel*, Frisian *eerdaapel,* German *Erdapfel, Erpfel*. The last example shows that compounds are sometimes no longer transparent but turned into opaque compounds due to various assimilatory processes. In England such motivated names did not catch on. The *Oxford English Dictionary* (1989) lists *earth-apple* as obsolete, supplies the meaning 'potato' with a question mark and adds "translating French *pomme de terre*".
- with *pear* as a simplex or as a second element of a compound: Swedish *pära, jordpära,* Norwegian *pære*, German *Birne, Erdbirne.* There are also cases with variation of the first element, in which more or less synonymous expressions with 'earth' are used, such as German *Grundbirne* and *Bodenbirne* (Viereck 1997).

4. Etymological Research: Faithfulness to Reconstructed Roots

Insights into the ethnolinguistic origins of Europe are also expected from the ALE. This is a most lively and controversially debated field at present. In the area of Indo-European scholarship, scholars developed three theories during the last decades, the oldest being the Invasion Theory according to which there was a gigantic invasion at the beginning of the Metal Age that brought Proto-Indo-European to Europe. Archaeology and genetic research proved a little later, however, that there was irrefutable evidence for cultural continuity from the Paleolithic to the Bronze Age in Europe. These insights led to the so-called Neolithic Dispersal Theory, which assumes that Neolithic farmers coming from the Middle East introduced Proto-Indo-European into Europe, and the Paleolithic Continuity Theory, which assumes that there were no invasions from non-European peoples. With the following example I want to show that it is not without speculation to deal with aspects going so far back in time. Alinei, a strong supporter of the Paleolithic Continuity Theory, asks "Why has Indo-European a common word for 'dying', but not for 'burying' and 'grave'?" (Alinei 2008:

15) and concludes that only the Paleolithic Continuity Theory can account for this. He places his common word for 'dying' (Proto-Indo-European **mer*-, attested, according to him, in Celtic, Germanic, Italic, Greek and Balto-Slavic) to Middle Paleolithic, which must therefore be regarded as belonging to Common Indo-European, while the notions of 'burying' and 'grave' belong, respectively, to the Upper Paleolithic and Mesolithic, when they were already expressed by different Indo-European words. In order to do this Alinei had to manipulate the data. In addition to **mer*- which, contrary to Alinei's belief, is not attested in Celtic, nor in Albanian or Tocharian, the following verbal roots are listed in Mallory and Adams (1997: 150), s.v. *death*, with the meaning 'die, perish': **nek-, *ųel*- and **dheu*-. They were as equally widespread as was **mer-,* and, consequently, of the same age. In contrast, the distributions of **dhg^{w}hei*- 'perish'*,* attested only in Greek and Sanscrit, and **(s)ter*- 'kill', attested only in Germanic and Old Irish, suggest late isoglosses in Indo-European. Thus, judging from the distributions of the verbal roots in Proto-Indo-European we can postulate at least a relative temporal difference between the two groups without pinpointing it to a specific period. If we are faithful to the data, as, of course, we should be, Alinei's example does not prove what he says it proves. All too often scholars are so proud of their theory that they disregard the data when they do not fit the theory. This led Raven I. McDavid, Jr., who, as a dialectologist, had always been faithful to the data to the remark that "for many linguists, *data* has become the most obscene of all four-letter words" (1972: 192).

4.1. Etymological Considerations

In connection with the above remarks designations of 'grave' will be investigated in a number of European languages. They were elicited as responses to the ALE question: "Quel est dans votre dialecte le nom du trou dans la terre où l'on met le mort?" [What is in your dialect the name of the hole in the earth where one lays the dead?]. As already noted above, these words are very old indeed in European languages. The first forms of burial appear already in the Middle and Upper Paleolithic (Viereck 2006). These words are divided into remarks on Indo-European and Non-Indo-European languages. I shall start with the former as they were and are clearly dominant in Europe.

4.2. Indo-European Languages

The modern expressions for grave in these languages can be traced back to the following eight roots:

4.2.1. Indo-European **ghrebh*- 'to dig', 'to scratch', 'to scrape' (Pokorny 1959-1969: 455f.), *?*g^{h}reb^{h}*- 'to dig' (Rix/Kümmel 2001: 201)

In most European languages the modern expression for the hole in the earth in which one lays the dead goes back to this root. In the Germanic languages it developed into Gothic and Old High German *graban,* Old English *grafan* and Old Norse *grafa.* From these verbs nouns were formed, namely Old High German *grap* > Modern German *Grab,* Old English *græf* > Middle English *grave* (the disyllabic form was probably due to the especially frequent occurrence of the word in the dative [locative] case) > Modern English *grave,* Old Norse *grof* > Danish *grav,* Swedish *graf* and Icelandic *gröf,* Old Saxon, Middle Low German, Middle Dutch *graf* > Modern Dutch *graf.*

As Old Church Slavonic shows *grebó* 'to dig' and *grobъ* 'grave', the mentioned root is also the basis for most of the Slavonic languages: Today we have *grob* in Serbian, Croatian,

Slovenian and Bulgarian, *grób* in Polish, *hrob* in Czech and Slovak and *row* in Sorbian. Slovenian dialects also show the diminutive *grobec* as well as *grobišče, groblje* and *pogrob,* all going back to this root. Russian *grob* today means 'coffin', whereas it also meant 'grave' earlier (Pfeifer 1999: 590). Whether Romanian *groapă* 'grave' is related to the Slavonic languages, for instance, to Bulgarian *grob*, is a matter of debate. There are etymologists who assume *groapă* to be autochthonous, and others who relate it to Albanian *gropë,* also meaning 'grave', 'pit' (Ciorănescu 2002: 379). That *gropë* is an old word in Albanian becomes apparent through the presence of the related verb *gremonj* 'to dig'. The notions for 'grave' in Romani show that Romani borrowed freely from neighbouring languages: *hrobos* is a loan from Slovak *hrob, grabo* a loan from German *Grab, govr* a loan from Yiddish *kewuro* and *morminto* a loan from Romanian *mormânt* (Wolf 1960: 93, 102, 154).

4.2.2. Indo-European **tu̯em* 'to swell' (Rix/Kümmel 2001: 654)

This root developed into Old Greek (and Modern Greek) *τύμβος* 'earth-mound', 'grave-mound' (Hofmann 1950: 378 and Frisk 1954-1972: 943f.) and Latin *tumēre* 'to swell', which, in turn, gave *tumulus* 'earth-mound', 'grave-mound'. English *tumulus* is a loan from Latin; its meaning is 'an ancient sepulchral mound'. The post-classical, Church Latin expression *tumba* 'grave' indicates that this word is a late loan from Greek and not a further development of the Latin words mentioned (Walde 1930-1956: 715). *Tumba* penetrated into several Romance languages, see French *tombe* and *tombeau,* Italian, Provençal and Catalan *tomba* and Spanish, Portuguese and Sardinian *tumba,* always meaning 'grave' (Dee 1997: 536). Löpelmann (1968: 1314) lists *tonba* and *tunba* 'grave' in Basque; these are loans from the neighbouring Romance languages. English *tomb* — with obsolete spellings *tumb* and *tumbe* — 'grave' is a loan from Old French *tombe.* The final *-b* began to be mute in English in the early 14th century, but the spelling has survived and since the 17th century has been the accepted form. *Tumba* was also borrowed into German where it means 'sarcophagus-like structure of a grave with a ledger'.

4.2.3. Indo-European **bhedh-* 'to prick, especially in the earth, to dig' (Pokorny 1959-1969: 113f.), **b^{h}ed^{h}h$_2$-* 'to prick, to dig' (Rix/Kümmel 2001: 66)

In Latin this root developed into *fodere, fōd(ī-* 'to dig', *fodicāre* 'to prick repeatedly' and *fossa* 'the ditch'; 'the pit'. One finds modern *fossa* with the meaning 'grave' in Catalan and Rhaeto-Romance.

With Bretonic *béz,* Welsh *bedd* and Cornish *bedh* also three Celtic languages possess words for 'grave' with the same root. The development came about via Gaulish *bedo-* 'ditch'.

Related forms are found in Hittite *paddai* 'digs', Old Church Slavonic *bodǫ* 'to prick', Lithuanian *bedù* 'to prick', 'to dig'; Gothic *badi* 'bed', Old High German *betti* 'bed' > Modern German *Bett* 'bed' and — since the 17th century — *Beet* 'garden bed' and Old English *bed(d* > Modern English *bed.*

> "The primitive notion 'a dug out place' had quite disappeared in Germanic, in which the word had only the two senses 'sleeping-place of men' and 'garden bed'. lt is uncertain whether the latter came independently from the root idea of 'dig', or whether it was a transference from a bed for sleeping, with reference to its shape or purpose." (*Oxford English Dictionary* 1989, s.v. *bed*, sb.).

4.2.4. Indo-European **sep-* ‘to occupy oneself with something’, ‘to honour something/someone’ (Pokorny 1959-1969: 909), ‘to care about’, ‘to honour’ (Rix/Kümmel 2001: 534), ‘to pursue something with sincere sympathy’ (Walde 1930-1956: 487)

From this root and its extension **sep-el* ‘respect’, ‘care’ Latin *sepelīre* ‘to bury’ (‘to inter’ or ‘to burn’) developed, which, in turn, also gave *sepultūra* ‘burial’, also ‘burning’ and *sepulcrum* ‘grave’, ‘grave-mound’. Modern reflexes of these words can be found in almost all Romance languages, see Catalan *sepultura* or *sepulcre* (Corominas 1954: 28), Portuguese *sepultura* or *sepulcro* (Machado 1977: 182), Italian *sepoltura* or *sepolcro,* Spanish *sepultura* or *sepulcro* and French *sépulture* or *sépulcre.* English *sepulchre* ‘a tomb or burial-place’ and *sepulture* ‘interment, burial’, ‘a burial-place, grave’ are loans from Old French.

Connections exist with Sanscrit *sápati* ‘caresses, cares’ and with Old Persian *hapariya-* ‘to show respect’.

4.2.5. Indo-European **(s)kep-, *(s)kop-* or **(s)kap-* ‘to cut with a sharp tool’, ‘to split’ (Pokorny 1959-1969: 930ff.), **(s)kep-* ‘to hoe’, ‘to cut’ (Rix/ Kümmel 2001: 555)

Here we have a case of the so-called mobile *s.* When Indo-European *s* formed the first member of an initial consonant group, it was an unstable sound and liable to disappear under conditions which have not yet been accurately defined.

Old Prussian *enkopts* ‘to bury’, Lithuanian *kãpas* and Latvian *kaps,* both meaning ‘grave (-mound)’, go back to this root. There is Greek *(σ)κάπετος* ‘ditch*’,* ‘grave’ and Old Church Slavonic *kopajo, kopati* ‘to dig’ (Fraenkel 1962-1965: 217). Polish *kapi* ‘churchyard’ or Russian *kopa* ‘heap, stack’ must also be mentioned in this connection.

4.2.6. Indo-European **u̯er-* ‘to lock, to cover, to guard, to save’ (Pokorny 1959-1969: 1160f.), ‘to protect’, ‘to save’ (Rix/Kümmel 2001: 684f.)

The Albanian deverbal noun *varr/vorr* ‘grave’ developed from this root (**u̯ornā*). *Varr* is the southern or Tosk dialectal variant, whereas *vorr* is the northern or Geg form. There is a connection with Albanian *vathë* ‘enclosure’ and probably also with Albanian *birë* ‘hole’ and *grovërë* ‘pit’ (Meyer 1982: 37).

From this root also developed, inter alia, Middle Irish *fert* ‘grave-mound (closed with stones)’ (> Modern Irish *fert* ‘grave[-mound]’), Gothic *warjan,* Old Norse *verja,* Old English *werian* > Modern English *to ware* (the Old English meanings ‘to guard’, ‘to defend’ did not survive into Middle English) and Old High German *werian* > Modern German *wehren* ‘to defend’, ‘to protect’.

4.2.7. Indo-European **men-* ‘to think, to be mentally excited’ (Pokorny 1959-1969: 726ff. and Rix/Kümmel 2001: 435f.)

This root developed into Greek *μέμονά* ‘desire, remember’, Oscan *memnim* ‘memorial’ and Latin *meminī* ‘remember’ and *monumentum/monimentum* ‘memorial’, ‘something that reminds’, ‘tomb’. Romanian *mormânt/mormînt* and Romani *morminto,* both meaning ‘grave’, are derived from the last-mentioned word (Meyer-Lübke 1935: 465, Cihac 1879: 170 and Wolf 1960: 154). Latin *monumentum/monimentum* also found its way into Welsh, cf. *mynwent* ‘graveyard’, and into English. The earliest recorded sense of *monument* in English,

now obsolete, was ‘a sepulchre, place of sepulchre’. 1300 is the first attestation listed in the *Oxford English Dictionary* (l989), 1658 the last in this meaning. The sense ‘a structure of stone or other lasting material erected in memory of the dead, either over the grave or in some part of a sacred edifice’ was adopted in English only in the late 16th century (*Oxford English Dictionary*, 1989, s.v. *monument*, sb. 1 and 5b).

Related expressions exist in a number of Indo-European languages, such as Sanscrit *manyate* ‘thinks’ and *mánas-* ‘sense’, Armenian *i-manam* ‘understand’, Old Irish *do-moiniur* ‘believe, mean’, Lithuanian *menù* ‘to remember’ and *manyti* ‘to understand’, Latvian *minêt* ‘to remember’ and Old Church Slavonic *po-mъněti* ‘to remember’.

4.2.8. Indo-European **mogh-* ‘big, strong, heavy’ (Wade 1999: 123)

Wade sees a connection between this Indo-European root and present-day Russian *mogila* ‘grave’, namely via Old Church Slavonic *mogti* ‘to be able to’. However, he also mentions alternatives and alludes to possible connections with Arabic *maghārah* ‘cave’, Albanian *gamulë* (with *g-m/m-g* metathesis) ‘mound of various kinds’ and Romanian *măgură* ‘mound’.

Vasmer (1950-1959: 144), in contrast, places Old Russian *mogyla* ‘grave-mound‘ together with Old Church Slavonic *mogyla* ‘mound’, Bulgarian *mogila* ‘mound’, Serbian and Croatian *gòmila* or *mògila* ‘heap of earth’, Slovenian *gomila* ‘heap of earth’, Czech and Slovak *mohyla* ‘heap of earth’, ‘grave-mound’ and Polish *mogila* ‘grave, grave-mound’. Today *mogila* is obsolete in Slovenian. The basic meaning of all these words was ‘mound’. To these ought to be added as likely Slavic loanwords Romanian *măgură,* already mentioned above, and Albanian *gamulë* as well as *magulë ‘*mound*,* a small hill’ — the latter is a form of Albanian used in Greece. Moreover *mogila* is found today not only in Russian, as mentioned already, Ukranian and Belorussian, but also in the Uralic Komi-Permyak, where it must be considered as a loan from Russian.

4.2.9. Irish and Scottish Gaelic *uaigh*

Modern Irish and Scottish Gaelic *uaigh* ‘grave’ goes back to Old Irish *uag*, which meant the same. *Uad* also exists, but this is only a Middle Irish graphic doublet of *uag.* Several etymologists explain it as an old word for ‘eye’. In a number of languages ‘eye’ served to designate a hole, an opening, as in Old Irish *derc (>* Modern Irish *dearc),* Greek *ópή*, Gothic *augo-dauro* ‘window’, Old Icelandic *vind-auga* ‘window‘, Sanscrit *gṛhāksa-*’window’ (literally ‘eye of the house’). This hyothesis, however, remains somewhat doubtful, as Gothic *augo* alone lends itself to several explanations (Vendryes 1978: U-2).

4.3. Non-Indo-European Languages

In the case of loanwords Non-Indo-European languages have already occasionally been mentioned.

4.3.1. Basque

Apart from the Romance loans *tonba* and *tunba* ‘grave’, Basque has *hilobi* ‘grave’, ‘burying place’ and *hilarri* ‘sepulchre’. Both nouns derive from the base *hil* that as a verb means ‘to die, to kill’ and as an adjective ‘dead, peaceful, quiet’ (Kühnel 1999: 33). Whereas *-obi* is a suffix, *harri* is a noun and means ‘stone’. Löpelmann (1968: 518f.) sees the origin of *hil* in

Aegean that came into Basque via Iberian mediation. Evidence for this is the similarity of Iberian *ildu* with Basque *il du* 'he killed him'. Furthermore, there are connections with Etruscan *hil* or *il* 'to kill, to sacrifice' and Hebrew *hilel* 'to pierce', 'to injure'.

4.3.2. Finno-Ugric Languages

4.3.2.1. Finnish and Estonian: In Finnish there is only one word for 'grave', namely *hauta.* According to the most recent Finnish etymological dictionary (Kulonen 1992: 148) *hauta* has equivalents with the same meaning in all the Finnic languages: Ingrian *hauta,* Veps *haud, houd,* Karelian *hauda,* Votic *auta,* Estonian *haud* and Livonian *ōda.* The word has an etymological counterpart also in Lappish: Norwegian Lappish *haw'de,* which is believed to be a Finnish loan, and Swedish Lappish *saude* 'tar pit'. 'Tar pit' is also in Finnish *tervahauta,* that is 'tar grave'. *Hauta* might be a loanword from Proto-Germanic **sauþa* > Proto-Finnic **savta* 'grave' (Koivulehto 1976). Proto-Germanic **sauþa* developed into Old English *sēaþ* 'pit, grave; well' > Modern English *seath* 'pit, hole, well, pool', now obsolete. Like Finnish *hauta* Estonian *haud* is found in all netpoints of the ALE. As secondary responses there are some compounds in Estonian, for instance *surnuhaud, surnehaud* < *surnu* 'dead, corpse', actually a past participle of the verb *surra* 'to die', which is of Finno-Ugric origin + *haud,* and *kooljahaud, kooluhaud* < *koolja* 'dead person, deceased', a deverbal noun of the verb *koolda* 'to die', which is of Uralic origin + *haud.*

4.3.2.2. In Hungarian, 'grave' is *sír,* the etymology of which is unknown. However, there is an attempt to relate *sír* to the Finno-Ugric period and explain it as inherited from that base language, but there are etymological and phonetic difficulties. *Sír* was first attested in 1055 with the same meaning the word has today, namely 'grave, grave-mound'. Moreover, there are two compounds for this notion: *sírgődőr* (Benkő 1993-1997: 472 and 1332) where *gődőr* means 'valley, hollow' (first attestation 1251), 'great hole' (1566), 'grave' (1777) and s*írhalom* with *halom* meaning 'small mound' (1055) and since the 16th century 'heap, quantity, thrust'.

4.3.3. Semitic/Maltese

'Grave' is *qabar* in Maltese, which comes from Arabic *qabr* 'grave'. This is a deverbal noun which is derived from the verb *qabara* 'to bury'. In the past, Romance/Italian *tomba* seems to have been used in restricted circles, too; it is extant in the place-name *It-Tomba,* found in Victoria, Gozo. The place-name is associated with a square where there was once a medieval cemetery.

4.3.4. Altaic Languages, Especially Turkish

A number of words meaning 'grave' exist in Old Osman, in the Turkish literary language and in Turkish dialects. Among the Old Osman words mention must be made of *delik* < *delük* 'hole', *eşin* < *eş* 'to dig', *kara ev:* literally 'black house', *karaŋu:* literally 'darkness', *kör* < a loanword from Persian *gūr* 'grave', *sin* < originally a loanword from Chinese *ts'in* 'inner room of an ancestral hall', 'tomb, sepulchre' and *yėr ķarn?'* literally 'earth-belly' (*yėr* 'earth' + *ķarn* 'belly' + ?= possessive ending of the 3rd pers. sing.).

Expressions for 'grave' in the Turkish literary language are: *mezar* < Arabic *mazar* 'place of pilgrimage', 'sanctuary' < Arabic *zāra* 'to visit' and *meşhet* 'grave of a martyr' < Arabic *maşhad.* In Turkish dialects the following words are attested for 'grave': *gömgen* < Turkish

göm- ‘to bury’ + *gen,* which is a rare word-formation element, *görün* < a loanword from Persian *gūr* ‘grave’ + an unidentifiable second element, *ḳara yėr:* literally ‘black earth’ *(ḳara* ‘black’ and *yėr* ‘earth’), *sin* < Old Turkish *sin,* which is a loanword from Chinese *ts’in* ‘inner room of an ancestral hall’, ‘tomb, sepulchre’, *teşik* < *teşük* ‘hole’ and *yağz yėr:* literally ‘dark-brown earth’ (*yağz* ‘dark, dark-brown’ and *yėr* ‘earth’).

4.4. Semantic Considerations

In most Indo-European languages—and beyond—the nouns were derived from a verb, as the designations for ‘grave’ go back to the activity that was necessary to produce one. All the Germanic languages belong to this large group and, with few exceptions, in the Slavonic languages all the corresponding expressions go back to the same root (cf. 4.2.1). Also those words that are derived from **bhedh-/*b^{h}ed^{h}h$_{2}$-* and ** (s)kep-* belong to this group (cf. 4.2.3 and 4.2.5). In one way or another the act of digging is the basis of the word. One can conclude with reasonable certainty therefore that in the respective countries the dead body was laid in a hole in the ground that had previously been dug. The Anglo-Saxons, by the way, dug a rather deep rectangular grave, often of considerable dimensions.

Also in other languages deverbal nouns exist where, however, the act of digging is not expressed. In the case of the root **tu̯em-* the original verb is not to be taken literally as nothing really swells (cf. 4.2.2). Rather one must assume that tumuli were the basis of this root that looked like a swell in the fields. In contrast to, for instance, **ghrebh-/?*g^{h}reb^{h}-* a hole was probably not dug first, but the dead body was covered with earth from which a mound resulted that looked like a swell. The same can be said of the root of Russian *mogila,* if one follows Vasmer’s interpretation (cf. 4.2.8). Albanian *gamulë* and *magulë* also belong here.

From verbs are also derived those nouns that go back to the roots **sep-, *u̯er-* and **men-* (cf. 4.2.4, 4.2.6 and 4.2.7). Here, however, acts and feelings are expressed that describe how one should treat dead persons, namely to honour, to cover, to guard or to remember them.

If one follows Wade (1999) and traces Russian *mogila*, which is also found in other Slavic languages, back to the root **mogh-,* this would be an exception within the Indo-European language family as this expression would then derive from an adjective and not from a verb (cf. 4.2.8). Wade sees the connection between a grave and the adjectives ‘big, strong, heavy’ in the description of a grave either as a dominating spot or as a place where the strong, powerful people, that is the Slavic elite, lie buried.

Also in Maltese, Turkish and Basque deverbal nouns are attested. It is striking that only in Basque the meaning of the verbal root is connected with death (cf. 4.3.1). In this, Basque differs clearly from all other languages mentioned where death plays no role in designating the grave.

5. Motivational Research

So much to loanwords and early etymological research within the frame of the ALE. But there is a third important aspect, namely the study of motivations.

Motivational mapping is an innovative manner of interpreting geolexical data. It goes beyond an interest in etymology and asks for the causes or the motives in designating certain objects.

Only in a large-scale project such as the ALE can this approach be successfully pursued. In national, let alone regional linguistic atlases, the area is usually too small for the approach to be very productive. This may be one reason why it had aroused so little interest prior to the ALE. Another may be seen in De Saussure's dominance in modern linguistics. The arbitrariness of the linguistic sign, important as it is for the functional aspect of language, left hardly any room for the genetic aspect of language, i.e. for the serious study of motivation. Seen more narrowly, however, the motivation of a linguistic sign is not in opposition to its arbitrariness, as the choice of a certain motive itself is not obligatory.

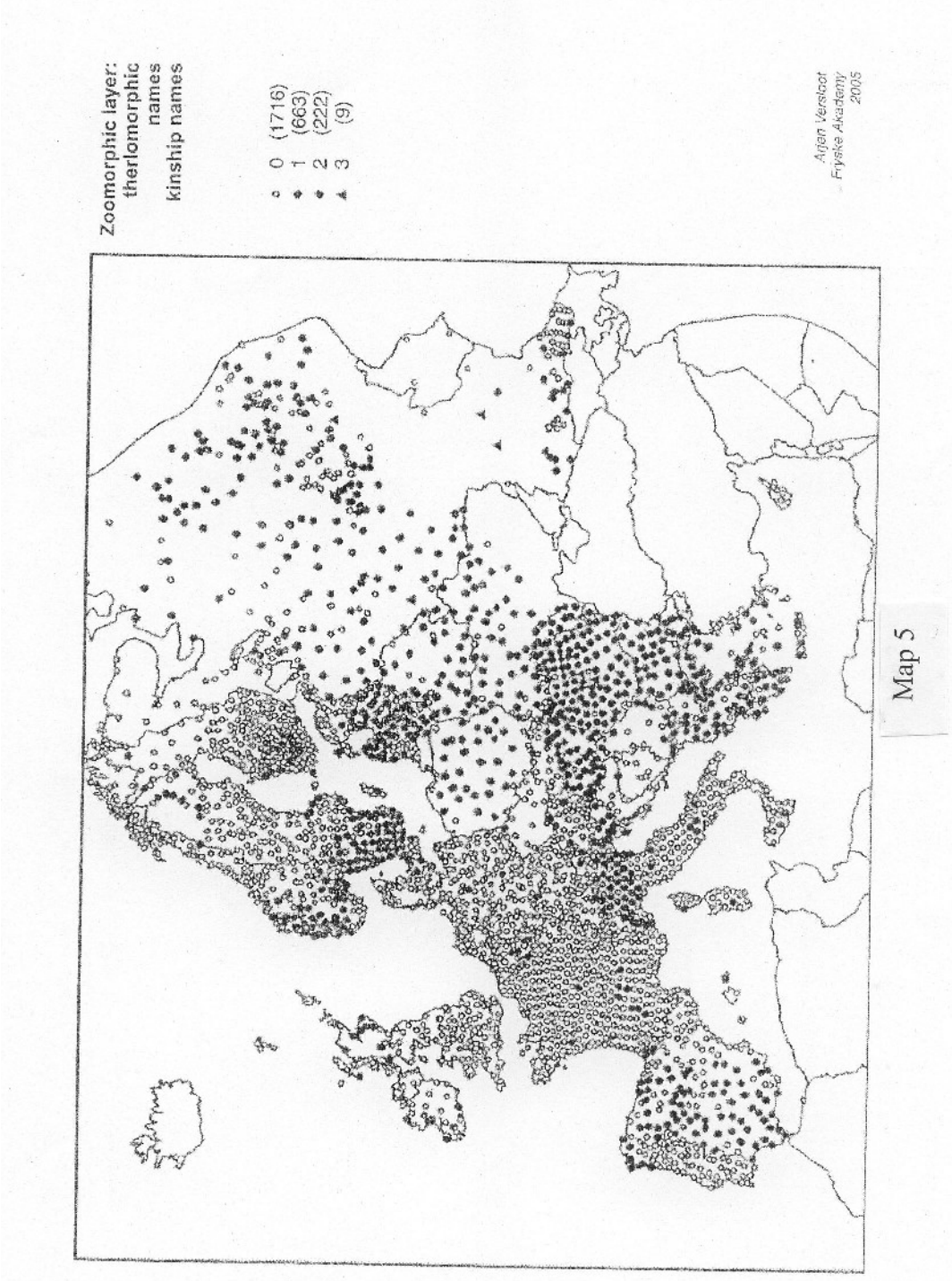
As regards the ALE, insights into Europe's cultural past follow less from loanwords and from reconstructed roots. Loanwords, as pointed out already, are too young, while reconstructed roots involve very early periods but are usually motivationally opaque and thus not very revealing for a cultural analysis. Insights into Europe's cultural past rather follow from motivations in so far as they are transparent. This is an important point, as formal differences between languages can thus be eliminated and the focus is solely on semantic parallelisms.

The motives for naming an object, of course, vary enormously. To give an example: Popular names for the plant *Taraxacum Dens-leonis* or *Leontodon Taraxacum* abound in Europe, which is no doubt due to its wide distribution. The names are not old, as the plant cannot safely be documented in the writings even of the early Middle Ages. Among the many motivational aspects there are those names referring to the shape of the leaves and to medical properties, i.e. to the effect the plant has on the bladder and the bowels. *Dandelion,* found everywhere in England, loan-translates medieval Latin *dens leonis.* According to the *Oxford English Dictionary* (1989) it first appeared in English in 1513 in the form *dent de lion.* 'Tooth of the lion' is also attested, e.g., in German *Löwenzahn,* Danish *løvetand,* Norwegian *løvetann,* Spanish *diente de léon,* Italian *dente di leone* and Welsh *dant y llew.* However, the standard French expression *pissenlit* refers to medical properties. It is interesting to note that *pissenlit* was taken over by neighbouring German and Dutch dialects as *Bettpisser, Bettseicher, Seichblum* and *pisbloem, zeikbloem* respectively (see Viereck 1997). In his study *Les noms populaires des plantes dans les Pyrénées Centrales* Jean Séguy concluded: "le chiffre le plus remarquable est celui du caractère forme ... en additionnant ... forme des feuilles, des fruits et des fleurs, on obtient 45,84%" (1953 : 380). Both Séguy (1953) and Seidensticker (1997) describe the different motivations in designating plants that refer to the various forms of the leaves, the blossoms and the fruit, but completely exclude mythology and the history of religion and culture that are in the centre of the discussion here.

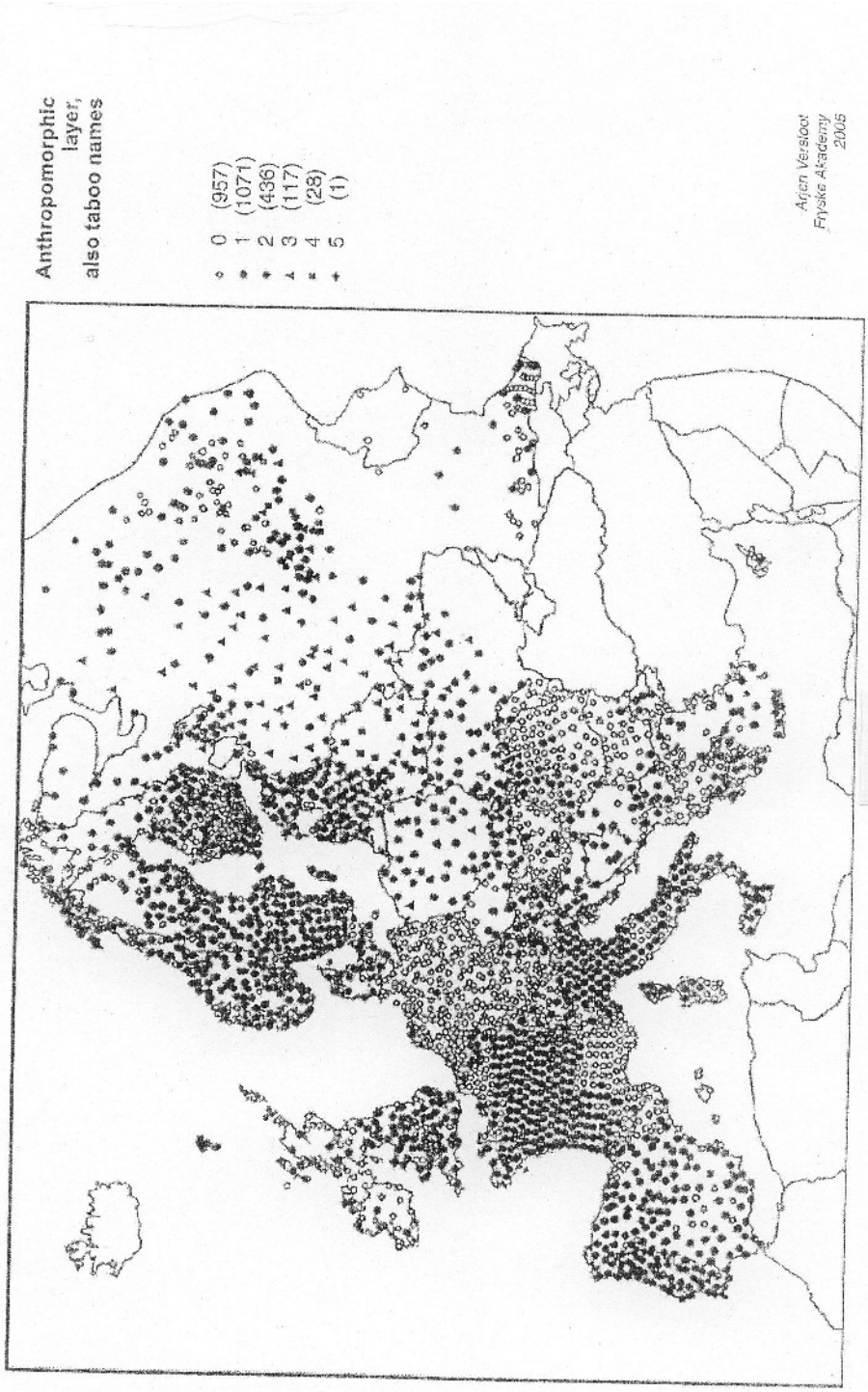
5.1. Cultural History and Religion

For elucidating Europe's cultural past the frame of reference is the history of religions, as religion is the basis of every culture. Geolexical data show that the cultural history of Europe is not made up of random elements and events but follows a unified, well-structured pattern where three separate layers can be distinguished, namely a historical layer, i.e. a Christian/Muslim layer, and two prehistorical layers, i.e. an anthropomorphic layer going back to the Metal Age and an even earlier zoomorphic layer that also includes kinship representations. They are connected with more primitive societies of the Stone Age (cf. Alinei 1997c: 27). Cultural morphologists had already described the basics of the two prehistorical layers in the 1920s and 1930s (see, e.g., Frobenius 1929). In view of the atlas results the third historical layer followed automatically. Unlike vertical dead archaeological stratigraphies, linguistic stratigraphies as presented on ALE motivational maps are horizontal and all the above layers are still alive.

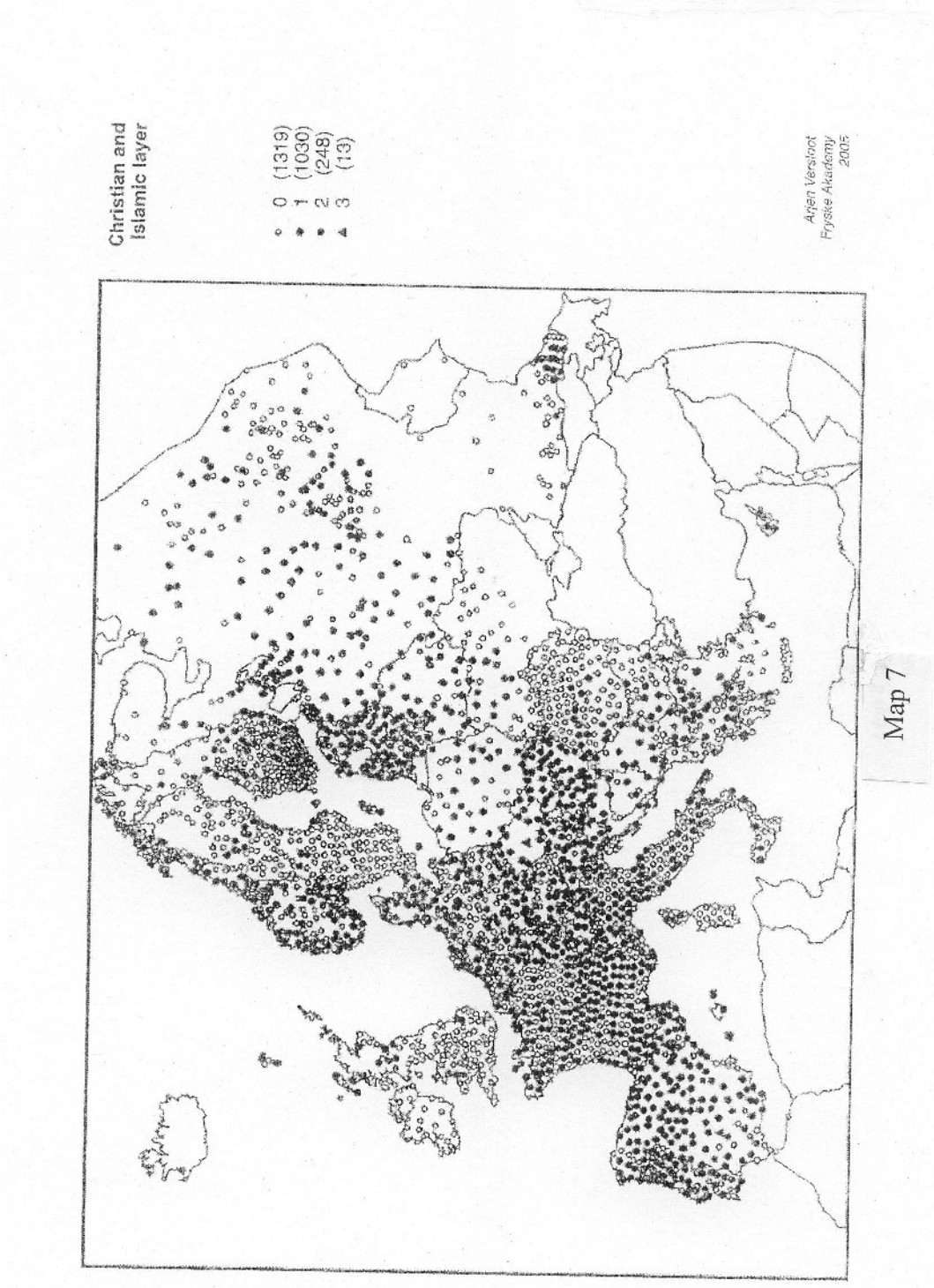
The following three maps (Maps 5-7) present the distribution of the ALE data according to the three layers mentioned. They are based on the responses to the following nine notions of plants, animals and natural phenomena: *blackberry, butterfly, cornflower, firefly, ladybird, lightning, rainbow, thunder* and *weasel.*



Map 5


Anthropomorphic layer, also taboo names
0 (957)
1 (1071)
2 (436)
3 (117)
4 (28)
5 (1)
Arjen Versloot
Fryske Akademy
2005

Map 6



Map 7

Generally speaking, the results are not surprising. Responses to the oldest layer are, of course, lowest in number. They are mainly to be found in the periphery of Europe, namely in Russia and parts of the Balkan. Answers that refer to the anthropomorphic layer are about twice as frequent as those of the zoomorphic layer. With the exception of Germany, the Netherlands and some regions in southeastern Europe (Hungary, Romania and Bulgaria) they are distributed fairly evenly over Europe, however with clear differences in frequency. Most of the anthropomorphic responses are, again, to be found in the periphery with Portugal in the West, Norway in the North, Sicily in the South and the Baltic states, Poland, Belorussia, the Ukraine and Russia in the East. In one locality in Lithuania five anthropomorphic answers were attested! Lithuania is in some respects a special case. This was the last European country

that became christianised and that only in the late 14th century. Therefore pagan rituals are still very much alive there. The old pagan religion is known in Lithuania today as "Romuva". Among its three main gods, Perkūnas, the god of thunder, is the most important one. His name often occurred in responses given by Lithuanian ALE informants. (For more information on Baltic, especially Lithuanian pagan religion cf. Trinkunas 2002.) Another reason why Lithuania is a special case is provided by the great English philologist Joseph Wright who remarked: "From a linguistic point of view I love the Lithuanians more than any race under the sun" (Sladen 2010: 20). In contrast to Sladen who calls this, strangely enough, a "perhaps perverse claim" (2010: 20), Wright, of course, knew that Lithuanian was then and is now the most archaic among all the Indo-European languages spoken in Europe, and as a result it is very useful, indeed, indispensible in the study of Indo-European linguistics. In Hungary, Romania, Bulgaria and Albania zoomorphic and anthropomorphic responses are in complementary distribution: frequent zoomorphic answers show hardly any anthropomorphic ones there. The most equal distribution of responses, however—surprisingly—not the most frequent in occurrence, is shown by the youngest layer. Christian motivations occur mainly in Spain, central Europe, Hungary and the Baltic States.

After this more general survey a number of examples as they relate to the three layers will be provided. Apart from analysing on a European level names for animals, plants, natural phenomena including planets and supernatural powers, I have substantiated this model by adding names for bread (Viereck 2000), names for children's games (Viereck 2003) and – together with my wife – names for diseases (Viereck/Viereck 1999). These areas are not touched in the ALE.

5.2. The Christian/Muslim Layer

The layer that can be recognized and dated most easily belongs to history, namely to Christianity and Islam. As this is the most recent level, it also occurs very frequently in the data. Within this layer Christian motivations appear much more often than Muslim ones, thus mirroring the difference in the areal spread of the two religions in Europe.

Among animals, designations of the smallest and weakest pig of a litter can be mentioned in this category. In England and Wales apart from *Daniel, Anthony(-pig)* was elicited, sometimes as *Tanthony,* a wrong separation of *Saint Anthony.* He was the patron saint of swineherds to whom the smallest pig of each litter was usually vowed. In Italian we find *Antonio del porco,* in various parts of Germany *Su-Antoni* and in Switzerland *Säu-Antoni.*

The butterfly[2], too, is Christianized in Europe, mainly in the South. In Greece the ALE notes the following: [pasx'itsa] 'little Easter', [tsɛlɛmb'is] 'beautiful young man' and [papaðj'a], [papaðj'ola] 'the Pope's wife', i.e. the wife of a Greek Orthodox priest. The last-mentioned expression clearly belongs to the historic layer, the last but one to the anthropomorphic layer and the first expression ('little Easter') is in between, so to speak. While Easter is of Christian origin, the pre-Christian influence makes itself apparent in the response 'little Easter'. We meet this designation also as an answer to Christmas and I will comment on it then. In Finland the butterfly is also called 'Brigit's bird' and in Norwegian dialects *marihoena* 'hen of the Holy Mary'.

[2] Cf. Dutch *botervlieg,* German *Butterfliege.* The *Oxford English Dictionary* (1989) surprisingly notes "The reason of the name is unknown" (s.v. *butterfly*). In the Germanic area the belief was widespread that witches in the appearance of butterflies stole butter, milk and cream. Compounds with *butter-* occur most often. Dutch *boterhex, boterwijf* – designations belonging to the anthropomorphic layer – clearly point to the belief in witches.

Also the lady-bird yields a rich harvest everywhere in Europe. Most commonly a Christian or Islamic religious being or notion is associated with another animal, such as a bird (cf. English *lady-bird),* a hen (Danish *marihøne,* French *poulette au bon Dieu,* Catalan *gallineta de la Mare de Deu),* a cow (English *lady-cow* or *cow-lady,* French *vache à Dieu,* Italian *vacchetta della Madonna),* an ox (Spanish *buey de Dios,* Romanian *boul-popeĭ)* or a beetle (German *Marienkäfer,* English *lady-bug).* The religious being or notion can be 'God' (Spanish *arca de Dios* 'God's chest'), 'angel' (Breton *elik doue* 'God's little angel'), 'Jesus' (Swedish *Jesu vallflicka* 'Jesus' shepherd'), '(Virgin) Mary' (Swedish *jungfru marias nyckelpiga* 'Virgin Mary's key servant', Italian *anima della Madonna* 'soul of the Holy Virgin', French *bête de la Vierge* 'animal of the Holy Virgin') or the names of saints such as, in Italy, *S. Martino, S. Gioani, S. Nicolà,* in France, *Saint Jean, Saint Jacques, Sainte Catherine* and, in Spain, *San Antón.* In the Muslim area we find 'Allah', 'mosque' and 'Fatimah', the name of Mohammed's daughter.

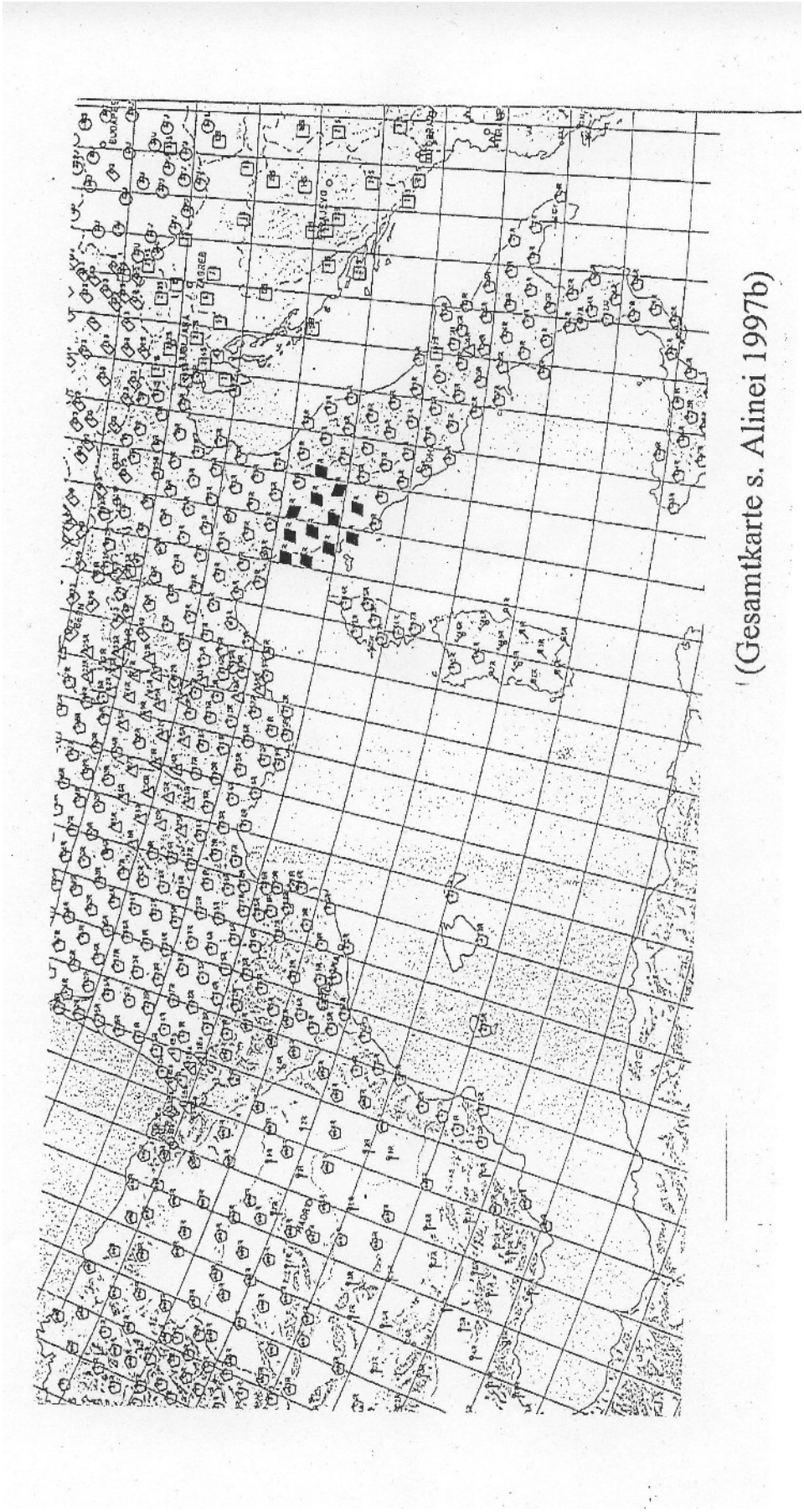
For plants the magico-religious motivations are more numerous. That the proof of 'language as a mirror of the history of religions' is possible so convincingly in botany is due to the founder of modern botany, Carl Linnaeus. He laid down the rules for naming plants and decided to retain all those names of plants that had been named after kings, gods or Christian saints. The pansy (Viola tricolor) may be called *Heiliges Dreifaltigkeitsblümchen* ('little Holy Trinity flower') in German. The daffodil (Narcissus Pseudo-Narcissus) is *Saint Peter's bell* in Wales, and *Saint Peter's herb* is an expression for the cowslip (Primula veris) in parts of England. Among the plants named after Christian saints may also be noted Latin *herba sancti Johannis* 'St. John's wort', German *Johanniskraut* 'John's wort', English *St. John's wort* (Hypericum) and *St. George's beard* (Sempervivum tectorum). In English quite a number of plant names refer to the Virgin Mary, such as *Lady's candlesticks* (Primula). The milk thistle (Silybum marianum) is *Lady's thistle, St. Mary's thistle, Marian thistle, holy thistle* in English, *Mariendistel* 'Mary's thistle' in German, *Chardon Marie* 'Mary's thistle', *lait de Notre Dame* in French, *Marietidsel* in Danish, *Carduo mariano* in Italian, *Mariatistel* in Norwegian and *Máriatövis* in Hungarian.

Natural phenomena as well as planets also testify to a Christianization and Islamization in Europe. The classic example of the ALE is the rainbow—and not only for the most recent level but for the whole geolexical stratigraphy. Everywhere in Europe we find compounds with, e.g.'belt', 'bow', 'bridge', 'ribbon', 'ring' plus a religious motivation such as 'God's belt', 'Noah's bow', 'St. Barnaby's crown' or 'Allah's bow'. In Albanian there is 'Mary's belt' and 'Our Lady's belt', in Latvian *dieva juosta* 'God's belt'. Once the basic structure of the classificatory system had been worked out, it became clear that the rainbow had been considered sacred by European peoples and that with the advent of new religions lexical innovations were coined expressing the same relationship that had existed earlier. Also the moon once had a religious veneration, still discernible in Hungarian *istenkalácsa* ('God's cake'). The fieldworker labelled this form 'jocular' and thus modern, which, of course, it is not. German *Herr Mond* as a form of address belongs to a pre-Christian cult. Similarly the address in German *Frau Sonne.* With regard to the sun Tuaillon notes: "Il est sans doute regrettable que le genre ne soit pas indiqué; cette donnée aurait peut-être, en domaine germanique du moins, montré quelques régions qui donnent au soleil un autre genre que celui de la langue nationale" (1983 : 5).

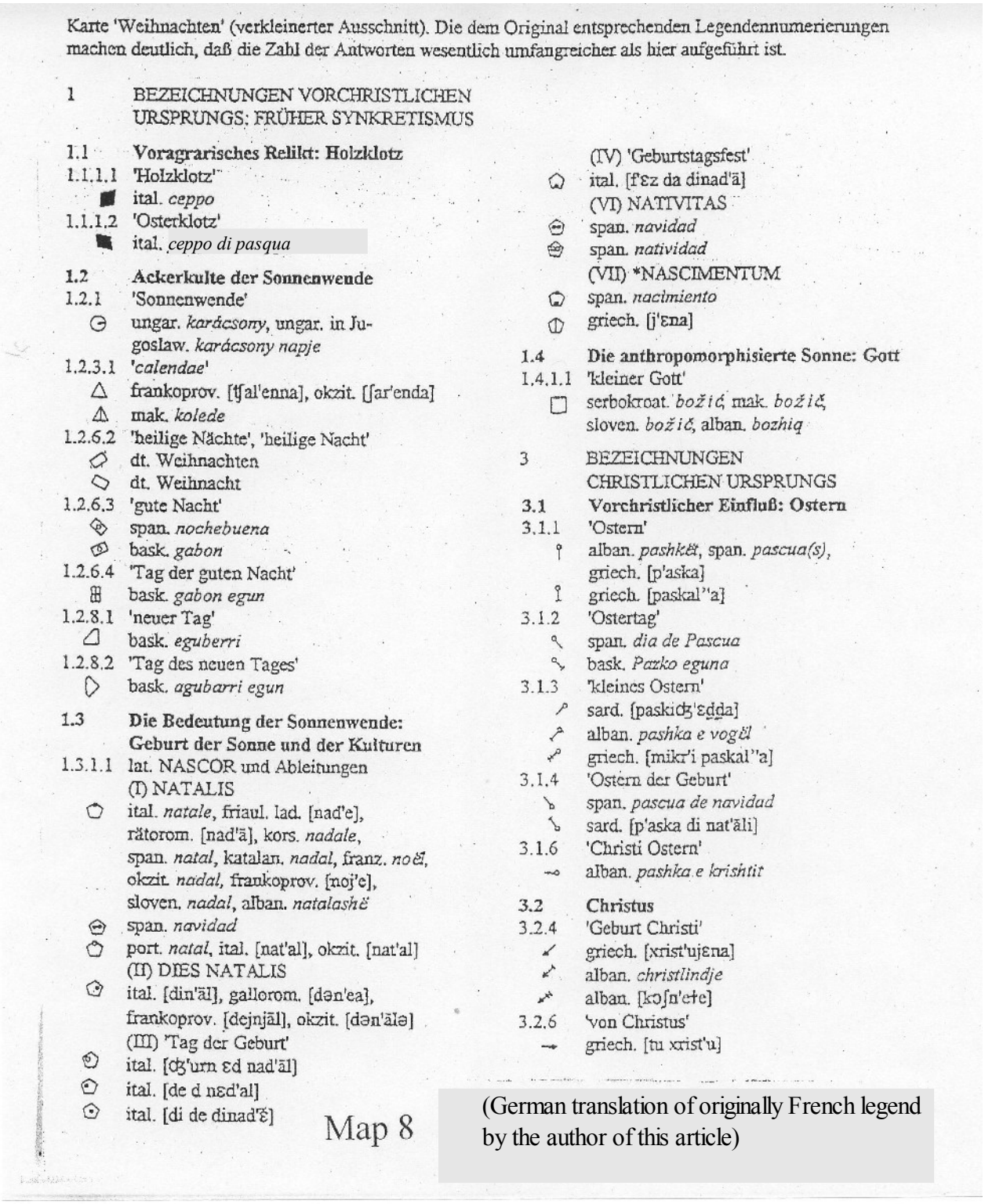
Also Christmas belongs to the natural phenomena as it is based on the pre-Christian winter solstice. Many of the responses can be allotted to this important pre-historic event. The

following groups, spanning the three layers, can be distinguished here. I shall concentrate on the Balkan:

- 'log': a pre-agrarian relic: We have Albanian *buzmi* 'log' > *nata e buzmit* 'the log's night' (= Christmas Eve); see also Serbian/Croatian *bàdniāk* 'log'; it is related to *badnjī dan* 'Christmas Eve'. "In Northern Albania the Christmas log is also venerated by the Muslim population, and the lengthening of the days is celebrated by processions, farming rituals, such as lustrations of the barnyard, of the cattle, of fruit trees and working tools. The log is greatly honoured: *buzmi bujár* 'noble log' is the respectful greeting addressed to it on the eve. The fire must burn the whole night." (Alinei 1997b: 266). Since Christianisation was more successful with the winter solstice than with the summer solstice, such fires for the winter solstice are met with today much more rarely. A similar idea is found in central Italy where *ceppo* 'log' means 'Christmas'. Or see English *Yulelog,* German *Christusklotz* 'Christ's log' or *Julblock* (Yule block), French *bûche* 'log', Basque *gabonzuzi* (from *Gabon* 'bonne nuit') or *xubil*, both meaning 'log'. These expressions were no longer elicited by the ALE. Here different religious conceptions become intermingled. A Christian syncretism is also found in Italian *ceppo di Pasqua* 'Easter log'.



(Gesamtkarte s. Alinei 1997b)



Karte 'Weihnachten' (verkleinerter Ausschnitt). Die dem Original entsprechenden Legendennumerierungen machen deutlich, daß die Zahl der Antworten wesentlich umfangreicher als hier aufgeführt ist.

1 BEZEICHNUNGEN VORCHRISTLICHEN URSPRUNGS; FRÜHER SYNKRETISMUS

1.1 Voragrarisches Relikt: Holzklotz
1.1.1.1 'Holzklotz'
ital. *ceppo*
1.1.1.2 'Osterklotz'
ital. *ceppo di pasqua*

1.2 Ackerkulte der Sonnenwende
1.2.1 'Sonnenwende'
ungar. *karácsony*, ungar. in Jugoslaw. *karácsony napje*
1.2.3.1 '*calendae*'
frankoprov. [ʧal'enna], okzit. [ʃar'enda]
mak. *kolede*
1.2.6.2 'heilige Nächte', 'heilige Nacht'
dt. Weihnachten
dt. Weihnacht
1.2.6.3 'gute Nacht'
span. *nochebuena*
bask. *gabon*
1.2.6.4 'Tag der guten Nacht'
bask. *gabon egun*
1.2.8.1 'neuer Tag'
bask. *eguberri*
1.2.8.2 'Tag des neuen Tages'
bask. *agubarri egun*

1.3 Die Bedeutung der Sonnenwende: Geburt der Sonne und der Kulturen
1.3.1.1 lat. NASCOR und Ableitungen
(I) NATALIS
ital. *natale*, friaul. lad. [nad'e], rätorom. [nad'ā], kors. *nadale*, span. *natal*, katalan. *nadal*, franz. *noël*, okzit. *nadal*, frankoprov. [noj'e], sloven. *nadal*, alban. *natalashë*
span. *navidad*
port. *natal*, ital. [nat'al], okzit. [nat'al]
(II) DIES NATALIS
ital. [din'āl], gallorom. [dən'ea], frankoprov. [dejnjāl], okzit. [dən'ālə]
(III) 'Tag der Geburt'
ital. [ʤ'urn ɛd nad'āl]
ital. [de d nɛd'al]
ital. [di de dinad'ɛ]
(IV) 'Geburtstagsfest'
ital. [f'ɛz da dinad'ā]
(VI) NATIVITAS
span. *navidad*
span. *natividad*
(VII) *NASCIMENTUM
span. *nacimiento*
griech. [j'ɛna]

1.4 Die anthropomorphisierte Sonne: Gott
1.4.1.1 'kleiner Gott'
serbokroat. *božić*, mak. *božiќ*, sloven. *božič*, alban. *bozhiq*

3 BEZEICHNUNGEN CHRISTLICHEN URSPRUNGS

3.1 Vorchristlicher Einfluß: Ostern
3.1.1 'Ostern'
alban. *pashkë*, span. *pascua(s)*, griech. [p'aska]
griech. [paskal''a]
3.1.2 'Ostertag'
span. *dia de Pascua*
bask. *Pazko eguna*
3.1.3 'kleines Ostern'
sard. [paskiʤ'ɛḍḍa]
alban. *pashka e vogël*
griech. [mikr'i paskal''a]
3.1.4 'Ostern der Geburt'
span. *pascua de navidad*
sard. [p'aska di nat'āli]
3.1.6 'Christi Ostern'
alban. *pashka e krishtit*

3.2 Christus
3.2.4 'Geburt Christi'
griech. [xrist'ujɛna]
alban. *christlindje*
alban. [kɔʃn'eɫe]
3.2.6 'von Christus'
griech. [tu xrist'u]

Map 8

(German translation of originally French legend by the author of this article)

- '(winter) solstice': agrarian cults of the solstice: Hungarian (also Hungarian in Romania, Slovakia, ex-Yugoslavia): *karácsony (napje);* cf. also (Old) Russian *koročun,* Bulgarian *kračon* 'Christmas Day' < Serbian/Croatian *kràčati,* Russian *koračit* 'to step, to pass' > 'a passing day across the turning-point' > winter solstice'.
- designations denoting a 'new beginning', 'New Year': Albanian *nata e kolendrave* 'New Year's Eve' < Latin *calendae* 'the first day of the month'; cf. Bulgarian *kólada* 'Christmas' > Romanian and Slavic *colinde* 'ritual songs for Christmas', Albanian

kolendarë ‘Christmas singer’. “The *colindatori* sing first at their host’s house, then at all the village’s houses ... to chase evil spirits away and announce their arrival .... [They] bring health and wealth, represented by a branch of fir placed in a vase full of honey and chickpeas .... A good number of *colinde* reflect a cosmic mythology quite alien to Christendom, concerning the creation of the world… God places the earth on four silver pillars…. Other archaic *collinde* present an island in the middle of the sea, where a gigantic tree grows, around which a group of girls dances.” (Alinei 1997b: 271).

- ‘birth’, ‘birthday’: expressions denoting the birth of the sun and of cultures, see Albanian [natalˈaššə] < Italian *natale* + the Albanian suffix *-ashë* < Latin *natalis,* cf. *Natalis Solis, Natalis Invicti* ‘birth of the undefeated sun’.
- ‘little God’, i.e., the anthropomorphised sun: Serbian/Croatian *božić*, Macedonian *božić/božik* > Albanian *bozhiq*, *bozhik*, Romanian *božić* < pre-Christian origin (‘little God’, ‘child-God’)

Then we also find Christian names for Christmas, of course. Seen in a European perspective, they are relatively rare.

- ‘Easter’: see Albanian *pashkët,* Greek *πάσχα*, [paskal’a] or Spanish *pascua(s).* ‘Easter’ for Christmas was also elicited in Frisian.
- ‘little Easter’: See Albanian *páshka e vogël,* Greek [mikr’i paskal’a] or Sardinian [paskidz’eḍḍa]. The pre-Christian influence is noticeable here. In pagan times two important feasts were celebrated in the course of the year. By naming Christmas ‘Little Easter’ it was made plain that the more important of the two was that in spring and summer, the real Easter.
- ‘Christ’s Easter’: See Albanian *pashka e krishtit*.
- ‘Christ’s birth’: Here Albanian *crishtlindje* < *crisht* + Albanian *lindje* ‘birth’, Greek [xrist’ujɛna] and Polish *Boże Narodzenie* (‘God’s birth’) can be mentioned.

5.3. The Prehistoric Layers

Within the prehistoric period two levels can be distinguished, one characterized by ‘supernatural’, ‘superhuman’ pagan figures and, leaving anthropomorphism, the other by still earlier zoomorphic and kinship representations. The basic structure has remained the same from prehistoric to historic times. It is quite natural that present-day evidence for the two prehistoric layers, especially for the zoomorphic layer, is less overwhelming.

5.3.1. The Anthropomorphic Layer

This middle layer is characterized by anthropomorphic representations. The same notions that provided examples for the other layers can be drawn upon here.

Animals provide quite a number of magico-religious names. The motivation for the smallest pig of the litter in Ireland is ‘little fairy’ (*síóg)* and ‘fairy elf’ (*siabhra*). For the weasel there is ‘fairy’ in English, ‘witch’ in French, ‘Diana’ in Sardinian, ‘demoiselle’ in German and ‘domestic genius’ in Russian. Taboo motivations also belong here, as Albanian *bukël(z)* (<*bukur* ‘beautiful, pretty’), Serbian/Croatian and Macedonian *lascia*, Russian *laska* ‘dear, darling’, Italian [*bella*] *donnola* ‘[beautiful] little woman’ or French *belette* ‘little beautiful woman’, all names for the weasel. They were coined to flatter the dangerous animal and to win its favour. The lady-bird is associated with the Finno-Ugrian god *Ukko* (‘the Old Man’),

in Frisian with the elf *Puken* ('puck'), in southern Italy with the elf *Monachello*, in Romanian with *Paparuga* and 'witch' and in Greek with the *Moira*. The butterfly appears in Austria as 'the forest elf' and in Dutch as *boterwijf* and *boterhex* ('butter witch'). Fairy names for the butterfly are also attested in Italian *(farfarello)* and French *(farfardet),* both closely connected with *farfalla* 'butterfly'. The grasshopper may be 'pregnant mother' and 'lady' in Italian and 'demoiselle, dame' in French. According to Alinei, these names point to an earlier no longer recognisable sacred female being.

As for plants, the motivation 'fairy' occurs in England for the Primula veris (*fairy cups*), 'witch' in English dialects for Pyrus Aucuparia, Leontodon Taraxacum and Digitalis purpurea. Furthermore, Wright's *English Dialect Dictionary* (1898-1905) notes 'Jupiter' for Sempervivum tectorum.

For the supernatural powers such as the corn spirit we also encounter anthropomorphic motivations such as, in Ireland, *carlin, seanbhean* (both meaning 'old woman'), *old maid, (old) hag, cailleach* ('old hag', also meaning 'witch'). A mythical 'old man' (*der Alte, der Kornalte*) is widespread in Germany, as is a mythical 'old woman' (*die Alte, altes Weib*) (cf. Beitl 1933/2000).

Among natural phenomena and planets, the rainbow has anthropomorphic representations everywhere in Europe. In the Turkic area they are associated with Tängri, in the Uralic area with Ukko and Tiermes, in the Indo-European area with Laume (in the Baltic region), Iris, 'old woman' (in the Romance region), often together with 'bow', 'bell or 'ribbon'. For thunder as well as for lightning one encounters Germanic Thorr, Lithuanian Perkūnas and the Finno-Ugric Ukko. Names for cloud can be motivated by 'old man', as in Swedish. For the moon we find 'old man' in the Nenets area and 'hoary old man' in Ostiac and for the sun there is the sun-god Yarilo in Russian and Ukrainian.

5.3.2. The Zoomorphic Layer

In the most archaic layer that can be distinguished, i.e. the zoomorphic and totemic layer characteristic of egalitarian societies, the realia investigated appear in the form of either an animal or a kinship name.

Starting with supernatural, magico-religious beings, an appropriate example would be the last corn sheaf cut at harvesting into which the vegetation demon, it was believed, retreated. In Ireland we find *granny* ('grandmother') and in German *Mutter* ('mother'), *Grosse Mutter* ('grandmother') or *Erntemutter* ('harvest mother') as designations for the last corn sheaf. Animal names are also attested for the last corn sheaf: *girria* ('hare'), *hare's bite/sheaf/seat/tail, cow, hog, piardóg* ('crayfish'), *rabbit* and *swallow* occur in Ireland. Many more animals are recorded in Germany (cf. Beitl 1933/2000).

Coming to animals, Riegler (1937/2000) had already interpreted wild animals and insects as relics of a totemistic view of the universe in which they would be our closest relatives. This relationship, similar to kinship, is consequently expressed by kinship terms. Propp (1946) notes that the totem animal in its original form is embodied by the 'mother' and by matrilinear kins. This is indeed what we most often find in European dialects. Many kinship names were recorded for the lady-bird: 'grandmother' in, e.g., Polish, Russian, Serbian and Croatian, 'mother' in, e.g., Romanian, Belorussian, 'aunt' in German and Italian, 'bride and spouse' in,

e.g., Turkish, Albanian, Italian, ‘sister-in-law’ in Bulgarian. ‘Grandfather’ occurs in Swedish and Maltese and ‘uncle’ in Albanian.

The butterfly as a relative appears as ‘grandmother’ in Rhaeto-Romance *(mammadonna)*, as ‘mother’ in German and Sardinian and as ‘(grand)father’ in the Uralic area.

Kinship names for the weasel abound: Albanian *nusëz, nuse lalës* (<Albanian *nuse* ‘bride’, ‘young spouse, youngest daughter-in-law’ + *lalë,* which is an allocutive for ‘relatives’). In Greek there is *νυφίτσα* ‘bride’ and in Bulgarian *nevestka, bulka* ‘bride, young spouse’. They have a clearly totemic origin. Moreover, (‘little’) ‘bride’ is also attested, e.g., in Romanian, Turkish, Italian, Greek, and German, ‘godmother’ in, e.g., Galician and Spanish *(comadreja),* ‘daughter-in-law’ in Portuguese, Occitan, Italian, Turkish and Hungarian, ‘mother’ in England and ‘godfather’ in German.

Many more examples of this type can be cited. Thus the bear is called ‘mother’, ‘father’ and ‘grandfather’ by Turkic and Tartar peoples and ‘dear grandfather’ by the Swedes. The Hungarians call it ‘godfather’ and the Lapps ‘clever father’. The fox appears as ‘godfather’ in German (as *vaddermann voß* in Low German ‘Mr godfather fox’ or as *Herr gevatter* in High German ‘Mr godfather’) and as *mon cousin* in French. The French word *parent* ‘relative’ is a name for the cuckoo in that language, and the toad is called *großmudder* ‘grandmother’ in Low German.

It must be interpreted as a sign of prehistoric totemism when tribes or their leaders were given names of animals. The leaders of the Jutes *Hengist* (‘stallion’) and *Horsa* (‘horse’) or the leader of the Goths *Berige* (‘bear’) are cases in point, as are the Germanic *Wylfingas* (‘wolf), the Italic *Hirpi* (from Latin *hirpus* ‘wolf) and the *Piceni* (from Latin *picus* ‘woodpecker’).

Compared with animals, plants do not seem to play the same role in totemism. Some plants are given kinship names, others are associated with animals. The pansy (Viola tricolor) is called *bratky* (‘brother and sister’) and ‘cuckoo’ in the Ukraine, and *Stiefmütterchen* (‘little step mother’) in German.

As to natural phenomena and planets, the moon is called ‘grandfather‘ in Nenets and thunder is called ‘father’ and ‘grandfather’ in the Finno-Ugric area. These relationships are clearly totemic. In this class of realia animals occur rather often. For the rainbow we have ‘dragon’, ‘snake’, ‘ox’, ‘cow’, ‘fox’, ‘drinking animal’ or simply ‘drinker’ in many European languages and dialects. In Albanian the zoomorphic designation [Arkuð Al’ɛni] exists, which is a loanword from Italian *arcobaleno* ‘whale’s bow’ or ‘dolphin’s bow’ in want of the non-existence of whales in the Mediterranean. Moreover, we find Albanian *ylber* ‘dragon’, ‘serpent’ for the rainbow. Other zoomorphic representations appear with thunder, also ‘dragon’ and ‘serpent’ and with lightning (‘whale and ‘dolphin’).

5.4. Conclusion

In the process of the cultural development of Europe we thus find recurrent structural patterns: the same reality was first given kinship and zoomorphic names to be followed by anthropomorphic names and finally by Christian and Islamic names – and this across all language and dialectal borders.

The three periods mentioned, of course, do not end and begin abruptly. Archaeological finds show that there were fluid transitions also between the Stone Age on the one hand and the Metal Age on the other and that anthropomorphic representations were known also in the Neolithic period (cf. Müller-Karpe 1998). Also Riegler noted: "Remarkable are the many transition phases that led from the theriomorphic to the anthropomorphic apperception" (1937/2000: 826f.; translated from German). That the transitions between the pagan and the Christian layer can be better documented are to be explained with the greater temporal proximity to us. Up to the early 4th century A.D. the early Christian church had been an underground church and it took many centuries until the Christian faith had penetrated the whole of Europe. In Scandinavia heathendom and Christianity had co-existed down to the 11th century (cf. Capelle 2005, who calls his book characteristically "heathen Christians") and Lithuania became christianised only in the late 14th century.

Just as earlier pagan places of worship had turned into Christian places of prayer, so Christian churches turned later into mosques. The best-known example of such a transformation is no doubt the Hagia Sophia in Istanbul. Also Jewish synagogues were consecrated as Christian churches. A good example of where the change was even kept in the name is the Sinagoga Santa Maria la Blanca in Toledo, which had become a Christian church already in 1405 long before the Jews were expelled from Spain in 1492.

With new religious beliefs a wave of new designations followed, yet the old conceptions often remained the same. To take just one example out of many:

> "When Christianity came to Britain, the bright yellow flowers of the plants in the *Hypericum* family that had been associated with the golden brightness of Baldur the sun-god came to be called St. John's wort, as Baldur's Day became St. John's Day. The plant continued to be thought a cure for wounds and on St. John's Eve good Christians wore a sprig of it to ward off evil spirits and especially to protect themselves against the stray thunderbolts of the gods." (Ashley 1974: 116).

Saint John's Day is the Christian equivalent of the summer solstice, one of the most important events in prehistoric times. In the early Christian period, pagan thought was alive and well. However, examples of this can easily befound today. The initials of Caspar/Kaspar+Melchior+Balthasar+the year are still written on the entrance doors of people's houses in Catholic areas in Germany, in Italy and in Poland on Epiphany, January 6, to protect the people from evil of any kind and small pictures of St. Christopher are hung up by car drivers as a protection in many countries, such as the Ukraine and Germany. Apparently Enlightenment has had no effect on people's piety.

The ALE relies, of course, on European dialects and languages. The motivational procedure unearthed some important elements in the mosaic of the cultural development of Europe. Unquestionably their consequences transcend the frontiers of the European continent. In the light of the complementarity of world cultures it would be highly desirable to complement the presented picture with insights into other cultures.

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