

Provided for non-commercial research and educational use only.
Not for reproduction or distribution or commercial use.



Volume 116, Issue 12, December 2006

ISSN 0024-3841

Lingua

International Review of General Linguistics

9 million researchers have access to ScienceDirect via their institute... are you one of them?

Available online at

 **ScienceDirect**
www.sciencedirect.com

This article was originally published in a journal published by Elsevier, and the attached copy is provided by Elsevier for the author's benefit and for the benefit of the author's institution, for non-commercial research and educational use including without limitation use in instruction at your institution, sending it to specific colleagues that you know, and providing a copy to your institution's administrator.

All other uses, reproduction and distribution, including without limitation commercial reprints, selling or licensing copies or access, or posting on open internet sites, your personal or institution's website or repository, are prohibited. For exceptions, permission may be sought for such use through Elsevier's permissions site at:

<http://www.elsevier.com/locate/permissionusematerial>



ELSEVIER

Available online at www.sciencedirect.com

 ScienceDirect

Lingua 116 (2006) 2183–2220

Lingua

www.elsevier.com/locate/lingua

Review

Europa Vasconica-Europa Semitica
Theo Vennemann, Gen. Nierfeld, in:
Patrizia Noel Aziz Hanna (Ed.), Trends in
Linguistics, Studies and Monographs 138,
Mouton de Gruyter, Berlin, 2003, pp. xxii + 977

Philip Baldi^{a,*}, B. Richard Page^b

^a *Department of Classics and Ancient Mediterranean Studies, 108 Weaver Building,
University Park, PA 16802, USA*

^b *Department of Germanic and Slavic Languages and Literatures, 311 Burrowes Building,
University Park, PA 16802, USA*

Received 8 February 2005; received in revised form 29 March 2005; accepted 29 March 2005

Available online 5 July 2005

Abstract

In this review article we evaluate Theo Vennemann's provocative theories on the role of Afroasiatic and Vasconic (e.g. Basque) languages in the pre-historic development of Indo-European languages in Europe as presented in the volume *Europa Vasconica-Europa Semitica*, a collection of 27 of Vennemann's essays. First, Vennemann argues that after the last ice age most of Central and Western Europe was inhabited by speakers of Vasconic languages, the only survivor of which is Basque. These speakers formed a substrate to the later-arriving Indo-Europeans. The primary evidence for the presence of Vasconic throughout much of Europe is drawn from the Old European hydronyms originally identified by Hans Krahe as Indo-European and reanalyzed by Vennemann as Vasconic. Second, Vennemann maintains that Afroasiatic speakers colonized coastal regions of Western and Northern Europe beginning in the fifth millennium BCE. According to his theory, these speakers formed a superstrate or adstrate in Northern Europe and had a profound impact on the lexical and structural development of Germanic. In the British Isles the language of these colonizers, which Vennemann calls "Semitidic" (also "Atlantic"), had a strong substratal influence on the structural

Abbreviations: OED, The Oxford English Dictionary; OLD, The Oxford Latin Dictionary

* Corresponding author.

E-mail address: phb@psu.edu (P. Baldi).

0024-3841/\$ – see front matter © 2005 Elsevier B.V. All rights reserved.

doi:10.1016/j.lingua.2005.03.011

development of Insular Celtic. In this essay we examine the evidence for and against Vennemann's theories and his methodology.

© 2005 Elsevier B.V. All rights reserved.

Keywords: Historical linguistics; Language contact; Indo-European; Germanic; Celtic; Afroasiatic; Basque; Hydronymy; Etymology; *Alteuropäisch*; Old Europe

Europa Vasconica-Europa Semitica is a provocative, stimulating and imaginative collection of 27 dense essays by one of the most creative thinkers in diachronic linguistics of our era, Theo Vennemann (whose name is not infrequently suffixed with the tag *genannt Nierfeld*). At the hefty price of about \$175.00 for its 977 printed pages, more than 60% of it written in German, the book is not for the casually curious reader. Evaluating this work is a serious challenge, because it confronts the reader on nearly every page with argumentation, theory, and novel proposals, together with an array of languages (viz. Basque and a range of Afroasiatic languages, as well as more familiar IE languages such as Germanic, Celtic and Italic) which may not fall within the competence of a single reader, or reviewer.

The volume contains essays published in the period 1984–2000 plus one previously unpublished paper. Articles printed here are left in essentially their original form, except that some minor errors have been corrected and English summaries have been added. There is an extremely useful outline of the entire enterprise written by Patrizia Noel Aziz Hanna (xiii–xxii), who also assisted with the English summaries, compiled the indexes and is listed as the editor of the volume. There is a composite set of references at the end of the volume rather than bibliographies for each article, an index of Atlantic and “Old European”¹ appellatives (common terms), an index of place names and a modest subject index.

In general terms, the ideas which underlie the two main theses of *Europa Vasconica-Europa Semitica* are the following (summarized from the Introduction): After the last ice-age, which ended about 11,000 years ago, Indo-European agriculturists, possibly originating in the Pannonian Basin of central Europe, migrated further into Europe in the sixth millennium BCE, arriving in Scandinavia beginning around the fourth millennium BCE. The migrating Indo-Europeans encountered other, non-IE people, who had started to settle there already in the eighth millennium BCE, i.e. several millennia after the last ice-age, and had already named the European rivers, lakes, mountains and settlements. Thus the oldest water names are probably the oldest “linguistic documents” in Europe north of the Alps. The structure of these names betrays an agglutinating language with initial accent, no vowel quantity and a predominant vowel *a*. The language family responsible for these names is called by V “Vasconic”, whose only surviving descendant is the Basque language of the Pyrenees. Additionally, there are toponyms on the Atlantic littoral which are neither Vasconic nor Indo-European. The prehistoric language responsible for these names (and other linguistic effects) is called by V the “Semitidic”

¹ “Old European” in V’s usage should not be confused with Gimbutas’ “Old Europe”, e.g. 1973. For a discussion of the terms see Schmid (1987), and below.

(also “Atlantic”), group of languages, i.e. languages related to the Mediterranean Hamito-Semitic languages,² which were spoken along the European Atlantic seaboard from the fifth millennium BCE until the first millennium CE. These languages are held to have influenced the Indo-European languages of the northwest littoral from the fifth millennium BCE onward.

The first thesis, which is in some ways the more radical of the two if for no other reason than the historical obscurity of Basque itself, is a fundamental revision of Krahe’s *alteuropäisch* hypothesis, which uses hydronyms as the critical data for establishing the linguistic character of “Old Europe” as Indo-European. V’s central claim is that speakers of Vasconic languages named the previously unnamed waterways and places of Pre-Indo-European Europe. According to V a significant number of these names survived the repopulation of Europe by the Indo-Europeans and even persist into modern times. Thus for V, Krahe’s *alteuropäisch* hydronyms and toponyms are not Indo-European of any age; they are Vasconic.

The second thesis, no less controversial but partly identifiable in previous literature (e.g. the work of Morris Jones and Pokorny), has several subparts:

- a. The Semitic languages of the Atlantic seaboard gave many loanwords to Indo-European, especially the western languages.
- b. Germanic was shaped both lexically and structurally by a Semitic, probably Phoenician superstratum.
- c. The strong substratal influence present in the Insular Celtic languages is due to the far-reaching Semitic influence on Western Europe.

Both major proposals are deeply rooted in the position that language contact is the norm rather than the exception in real-life linguistic communities, including those of ancient times, and that explanations for phenomena that have hitherto been weakly developed can be found by taking contact seriously, and by analyzing the data in the context of a comprehensive theory of the linguistic composition of prehistoric Europe.

In this review we will address the following issues:

1. The methodology—are the proposals consistent and coherent?
2. The Semitic theory—do the facts as they are found in both Celtic and Germanic lead inevitably to some measure of external influence as the basis for the phenomena it seeks to explain?

² “Hamito-Semitic” is V’s preferred term for what are now usually and more generally called “Afroasiatic” languages, a large family which includes several subfamilies: Semitic, Egyptian, Berber, Cushitic, Chadic and Omotic. The term “Hamito-Semitic” is no longer generally used because the composite label wrongly suggests that there is a group of “Hamitic” languages (e.g. Ancient Egyptian and its descendant Coptic) which is opposed to “Semitic” languages (e.g. Akkadian, Arabic, Hebrew and Aramaic). This distinction is not generally maintained in current literature (see e.g. Hetzron, 1987a:647), though references can still be found to “Hamitic” and “Hamito-Semitic”, including Orel and Stolbova’s recent etymological dictionary (1995). We make no attempt to resolve the terminology in this review, though to avoid confusion, we will use “Afroasiatic” as a general term.

3. The Vasconic theory—is it sound and is it supported by the facts, not only linguistic but archaeological and historical? How does it square with the *opinio communis* on the Indo-Europeanization of Europe, including the homeland arguments and the periodization of the settlement of the continent?
4. The book itself—is this collection the best way for V to make his point?

Given the lengthy span of time covered in this collection, and given the often strident reactions which the proposals contained in it have spawned in the scholarly and popular literature and even the popular media, much of what we have to say will rely on the work of others who have dealt with individual issues and proposals along the way for the past two decades. It is of course not possible to review every chapter in detail, or even to touch on all the issues that are raised in this book. Our goal is to present a synthesis and broad evaluation of V's theories which will stimulate debate and advance knowledge in these critical areas of inquiry.

1. The methodology

V's methodology differs considerably from traditional historical approaches. Because it is built on the assumption of similarities due to contact, and because it assumes no genetic connection between the IE languages and the Vasconic and Semitic languages with which they are held to have interacted, there is no principle of regularity, nor are there correspondence sets or phonetic rules to guide the way and to aid in the evaluation of specific etymologies. Many of the mainstay techniques of historical comparison and analysis (phonetic naturalness, rule ordering, analogical operations, grammaticalization) are necessarily missing from these pages, at least in their conventional form, since the central thesis is that contact is responsible for the effects V is analyzing. Given the enormous time depth which is operative in different parts of the theory (from the end of the last ice-age in the ninth millennium BCE to the end of Carthaginian influence in Europe around 200 BCE), and given the well-documented difficulties of conclusively identifying contact effects, the analysis, especially of the lexicon, does not lend itself to sweeping generalizations and overall statements of “laws” governing correspondences. Because of the general lack of structural systematicity obtaining among the languages involved in the investigation, that is, because there are no consistent statements of the type X:Y/_Z,³ each etymological proposal, and this holds true for morphological and syntactic phenomena as well, has to be evaluated on pretty much its own terms.

In examining the limited distribution of some lexical items in Indo-European, V looks for contact-based explanations. V states (653): “Substrates mostly influence the structure of their contact languages (notably in the domains of phonology and syntax), while

³ Nor should we expect them, since such correspondences are based on genetic comparison, not on sub- and superstratal influences. We mention the matter only to underscore the inherent difficulties in analyzing historical features in contact rather than in the more customary genetic terms, especially over such a vast expanse of time. Historical linguists, perhaps Indo-Europeanists especially, have long resisted contact or convergence as a viable linguistic evolutionary model ever since Trubetzkoy (1937), though it has been discussed as an auxiliary model also by Dixon (1997), Edzard (1998), Rubio (2003), and in a smaller domain by Hamp (1990).

superstrates mostly influence the lexicon of their contact languages (notably in the fields of warfare, law and communal life).” The guiding principle behind V’s specific proposals is summarized as follows (616):

Through the fact that there are so many words with a Basque or Semitic equation that occur only in West Indo-European languages, a new etymological research strategy is defined by the theory: take those words and try to find lexical correspondences in Basque or Hamito-Semitic, viz. in Basque if the word gives the appearance of a substratum word (plant names, names of “natural” animals, herding), and in Hamito-Semitic if the word gives the appearance of a superstratum word (“cultural” animals, advanced cattle breeding, terms referring to city building, warfare, societal organization, etc.).⁴

The initial analytical principle for the etymological portion of the theory, which is its main part, is a typology of loanwords based on the general behavior of contact languages: superstratum interference is more likely to include “cultural” lexical items (here, Semitic on Germanic), while substratum influence is more likely to be reflected in “natural” vocabulary (here, Vasconic in the toponymy and hydronymy of Europe and also Semitic in Celtic). But as Thomason and Kaufman point out, with numerous illustrations, “the traditional superstratum/adstratum/substratum distinction is of limited usefulness for the interpretation of most past shift situations⁵” (1988:118). So we must be cautious: simply because words are found which fit into a particular corner of the lexicon (say, river names or words for cooked food), and simply because they are represented in only one or a few contiguous IE languages (say, Germanic and Italic), this does not automatically suggest that a profitable research strategy for discovering their etymology would be to start searching the Basque or Afroasiatic etymological dictionaries for a reasonable structural and semantic match. Numerous other possibilities exist, including the very real one, as Krahe originally proposed, that the *alteuropäisch* toponymic and hydronymic data are indeed Indo-European, especially when suggestive confirmatory data are present from the non-European branches of the IE family (as reargued by Kitson, 1996). Indeed it is by no means rare, nor is it restricted to western IE languages, that good-looking IE words from many semantic domains are found in only a few IE languages (Germanic and Italic, Italic and Celtic, Greek and Armenian, for example). Explanations for such distributions abound: common retention of an inherited form which is lost elsewhere (Lat. *taceō*, Goth. *þahan* “be silent”); independent grammaticalization, when for example Lat. *habēō* “have” develops into a perfective auxiliary, just as does the Germanic ancestor of Eng. *have*; common innovations such as the development of PIE **ters-* “dry” into the meaning “land” in Italic (Lat. *terra*) and Celtic (OIr. *tír*).⁶

⁴ This statement of research strategy for Hamito-Semitic seems to be valid, however, only for the Germanic part of the Semitic theory, since Semitic is a substratum for Celtic according to V.

⁵ In particular, agentivity plays a crucial role in language contact regardless of the relative political and social status of the languages involved (Van Coetsem, 1988). See discussion below in B.3.

⁶ A variety of factors, internal and external, may conspire to promote a change and its spread. Milroy (1992) shows that external sociolinguistic factors motivate the spread of internal phonetically-motivated change.

Once data are identified as potentially belonging to a vocabulary level that may be either substratal or superstratal, V's next step is to check the distribution of the languages in which the word is represented. In the case of potential substratal items, the reliability of the etymology is evaluated by assessing the number and distribution of languages in which the word is represented. If it is a "northwest" word (basically Germanic, Celtic, Italic and occasionally Baltic), it is a good candidate for further checking. The next step is to consult the historical dictionaries of Basque to determine whether there is a potential structural and semantic parallel. If so, a case is made based on these three factors, namely vocabulary level, structural reasonability, semantic plausibility. Similar strategies are called into play in assessing the non-lexical aspects of the Vasconic proposals, specifically the remnants of the vigesimal counting system in Italic (cf. Fr. *quatre-vingt* "eighty"), and Germanic (cf. Eng. *score* "twenty", Germ. *Schock* "twenty pieces"); and the initial-syllable accentual system of Germanic, Italic and Celtic, which V claims speakers of these three groups (and possibly Etruscan) adopted from Vasconic in preference to the inherited IE accent pattern of free-syllabic accent.⁷

In the case of Semitic influences, the issue is often more subtle, and more complicated. Subtle because there is a considerably greater amount of non-lexical influence that is proposed which is even less obviously attributable to a contact language than are lexical effects.⁸ More complicated because the Semitic effects are of two fundamental types, namely superstratal on Germanic (e.g. cultural vocabulary), substratal on Celtic (e.g. verb-initial dominant word order). The research strategy once again is to search for possible antecedents in the Semitic languages when the facts are insufficiently explained by internal IE mechanisms, or lack a broad geographic distribution.

More specific discussion of these matters will be taken up below when we deal with the details of the Vasconic and Semitic hypotheses, but at this point we can state our general impressions of the methodology. At least on the lexical side, where it has its most general impact, the approach is suggestive and perhaps even right in places, but is in our view somewhat permissive, depending as it does on a rough similarity of form which is based largely on primary inspection, elaborate morphological analysis (especially for the Old European hydronymy) and a general de-emphasis of semantic considerations which often requires forced proposals in order to reconcile words of quite different meanings, though we do not view this latter feature of the theory to be in any way destructive. On the non-lexical side the approach tends to undervalue the possibility of typological parallelism between the IE and non-IE languages in question, or of

⁷ Halle (1997) maintains that accent in PIE was lexical, i.e., certain morphemes were marked as stressed in the lexicon. Words in PIE which lacked a morpheme with lexically marked accent had initial accent. In Halle's view, loss of lexical accent in Germanic, Celtic and Italic led predictably to initial accent. In a cross-linguistic study of northern Europe, Salmons (1992) shows that accentual systems are particularly susceptible to contact-induced change. In the case of Indo-European, internal and external factors may have contributed to the development of initial accent in much of Europe.

⁸ Structural effects, including those on English by Celtic, are explored by V in more detail in a string of later papers, e.g. (2002a), (2002b). For a fundamental evaluation and critique of the Afroasiatic substrate theory for Celtic (essentially a review of Pokorny's basic work on the topic, beginning in 1927 [see references]), cf. Jongeling (1995).

language-internal developments. In short, many of the same criticisms that have been leveled at other alternatives to standard historical analysis, in particular long-range multilateral comparison with exceedingly deep time horizons, are applicable here as well.⁹

1.1. A few words about semantics

V has been chastised by other critics of his theory for putting too much emphasis on morphology and not enough on semantics (e.g. Kitson, 1996). While we agree that V's morphological proposals are often a bit ambitious, and that his phonological observations are occasionally unsubstantiated or unsubstantiable because of the lack of consistent comparanda and the time depth of the data being examined, we nonetheless would be inclined to defend V's approach of working primarily with what he proposes as structural parameters rather than semantic ones. It is well known in traditional historical linguistics that good etymologies are based on a well-balanced combination of structural explanation and reasonable semantic description. In short, value is assigned to etymologies which are built on standard principles of regular sound change and analogy, together with semantic alignments which appeal to well-established metaphorical extensions and other lexical processes recapitulated in many other examples (e.g. widening, narrowing, concrete to abstract shifting and the reverse, and so on). But given the often wildly unpredictable nature of semantic change, it is usually the structural correlations which carry the day. It is no exaggeration to say that in the hands of a good etymologist, virtually any meaning can be reconciled with another given a few semantic liberties, or adequate historical/cultural information. So we would like to reassert the traditional position that states that for an etymology to be viable, it must satisfy structural viability first and foremost, semantics secondarily. Thus we would disagree in principle with other critics of this theory that V's semantics are too loose. An honest assessment of actually documented semantic developments in a variety of languages has convinced us that given the proper circumstances, both linguistic and social, virtually anything can change into anything else. One need not go far to find examples of completely unpredictable semantic shifts which would no doubt be rejected as far-fetched were they not verifiable by phonology or known social/historical circumstances. A few English examples will suffice: *fascist*, based ultimately on Lat. *fascis* "bundle (of twigs or straw)", which refers to a bundle of rods bound around a projecting axe-head that was carried before an ancient Roman magistrate by an attendant as a symbol of authority and power; *fornicate*, based on Lat. *fornix* "arch", where prostitutes lingered in Republican Rome; *fiasco* "complete failure", based on the Italian word for "flask" in an obscure stage allusion; *go* "say" (in narrative); and finally *bus* "vehicle of mass transportation", ultimately the dative plural inflection which remains after the clipping of the Lat. *omnibus* "for everyone". Even the most secure IE roots will reveal that semantic change moves apace without regard for orderliness. Take the classic

⁹ Lest we create the impression that we are equating V's method with largely discredited mass-comparison strategies, let us state emphatically that we are not making any such equation. We note only that both methods require more structural flexibility than standard approaches to language history, especially those with less ambitious chronologies, and that neither one depends crucially on strict phonetic comparisons.

PIE root $d^h\bar{e}$ - (d^heh_1), typically glossed as “put, place”.¹⁰ In nearly four pages of entries in Pokorny’s etymological dictionary of Indo-European (1951–1959), which is known for its conservatism, we find meanings ranging from “put”, “place”, “do”, “lay”, “make”, “put on clothes”, “settlement (of an estate)”, and a host of completely remote meanings which show up in composition, including “bestow”, “lease”, “guilt”, “judgment”, “condition”, and “point” to mention just a few.

Does V’s method then constitute a reasonable strategy for dealing with languages which may have been in contact more than 5–7000 years ago? Without giving too much credit to glottochronology, and taking its algorithms as only imperfect possibilities, nevertheless the projections for related languages of shared vocabulary after 5000 years of separation is only 12%, that is, the rate of vocabulary loss is so high that one could hardly expect system-wide lexical correlations in the IE language family to be the norm. So we should not be surprised that so many words in IE languages are found only in selected geographically contiguous stocks (Anttila, 1989:397). If we assume a rough version of V’s theory of IE diffusion, where PIE speakers spread out around the 6th millennium BCE from central Europe, by the time some of these languages are attested some 5–6000 years must have passed. So it is only natural to assume that there would be isolated shared patterns and especially lexical items in geographically contiguous languages.

1.2. Coinages

And what about spontaneous internal developments which arise in languages, ones that lack either genetic parallels or credible contact-based explanations? As Salmons has pointed out (2004), there are numerous instances in the history of documented languages of internal coinages which are of unknown origin and might make it therefore onto V’s candidate list for substratum status. Included in Salmons’ discussion are such examples as Eng. *dweeb*, *to boink*, *spam*, *to skank*, *skank*, and *scag*. Furthermore many such words violate or at least test native phonotactics, such as *dweeb* (with rare initial cluster *dw*-), *boink* (with velar nasal after diphthong or long vowel), or dramatically the word *bye* [^mbaɪ], a marker of leave-taking, or *OK* [^hkeɪ], a back-channel sign of assent, both of which are often prenasalized, or postlexical reductions like initial [ts] < [its], as in “ts OK”. Such patterns of lexical innovation do not necessarily imply contact and subsequent influence with other languages, but are the result of internal processes, some of which defy traditional etymologizing.

1.3. Summary

In summary, then, we would say that V’s methodology lacks verifiability in that it exploits similarities of structure and meaning which may be the result of typological factors or chance, or may be simply mirages which are only conceivable under the theory which V has formulated. Some, even many of V’s etymologies may be right, and it must be conceded that V argues his case in a persuasive and seductive manner. But it is difficult to

¹⁰ Like Pokorny, V does not use laryngeals in his reconstructions. We have added laryngeal-ful reconstructions in parentheses where appropriate.

escape the possibility of false equations, a constant hazard in long range etymological research. After all, there are enough similarities between old Basque and Proto-Semitic phonology and PIE phonology that some lexical look-alikes are inevitable. Demonstrations of this type were commonplace during the height of the Amerind debate (see e.g. [Campbell \(1988\)](#) on [Greenberg \(1987\)](#), earlier [Doerfer \(1973\)](#)), and we need not repeat them here. The likelihood of acceptable-looking pairings is increased by the flexible semantics which is inherent in all historical work of any time depth.

Of course there is more to V's method than lexical treasure hunting: considerations of accent, morphology and syntax are also discussed in the pages of this volume, and these are less easily criticized simply because there is no Neogrammarian principle of regularity against which such structural proposals are evaluated. But overall we conclude that V's approach is risky because it involves not only a controversial theory, but is also dependent on elusive contact patterns involving languages with obscure histories.

2. The Semitic (Atlantic) hypothesis

The basic idea behind the Semitic (Atlantic) hypothesis is that speakers of Hamito-Semitic languages exerted a superstratal influence on the Indo-European populations of northwest Europe, especially Germanic, and substratal influences on the coastal languages, especially Insular Celtic, beginning in the 5th millennium BCE. These influences are manifest in a variety of ways: on the non-linguistic side, V sees superstratal influence in the Germanic Vanir myth (outlined in chap. 11 of this volume), which contains numerous cultural features not easily recognizable as Indo-European. Among the themes V identifies are incest and marriage between sisters and brothers, and the harnessed team of cats (probably lions) of the goddess Freya. According to V elements of this myth can be linked to Semitic mythologies and he even proposes an etymological connection between Germanic and Semitic gods such as *Balder* and *Ba'al* (see in this vein [Vennemann 2004, forthcoming](#)). Another example of non-linguistic evidence attributed by V to Atlantic seafarers are the megalithic monuments of western Europe, which “are relics of a highly developed society and may well be such vestiges of an Atlantic culture” (xvii).

Linguistic effects caused by the Atlantic languages include toponyms and other common terms (“appellatives”), as well as forms and patterns in the structure of West European languages. Likely examples of toponyms and hydronyms are *The Solent*, *Solund*, *Isles of Scilly*; the river names *Tay*, *Taw*; and the *Pit*-names of Pictland such as *Pittenweem*. Examples of Atlantic appellatives include administrative labels such as the “ruler” word in Germanic (e.g. Germ. *Adel*); and the “house” word (Eng. *house*, Germ. *Haus*). On the non-lexical side, V attributes various aspects of Germanic ablaut to Atlantic influence. Opening up the possibility of Atlantic influence on such a core structural feature as internal vowel alternation of verbal forms (“Germanic ablauting verbs have been lexically enriched and grammatically systematized and functionalized by the Semitic-speaking peoples” (xix)) allows V to reinvestigate the etymologies of a number of Germanic strong verbs, in particular those with the consonant *p*. Such verbs are unusual from an IE point of view because they contradict the PIE “labial gap” (with Gmc. *p* the Grimm's Law outcome of the rare PIE *b*). V thus proposes new Atlantic etymologies for these verbs. Further

non-lexical influence by Atlantic languages is claimed by V to be responsible for anomalous structures in Celtic, most prominently the head-initial word order characteristic of Insular Celtic languages, a feature which V claims can be attributed to Atlantic influence.

2.1. *Atlantics in Britain*

The idea that there is a historic relationship between the Insular Celtic languages and the Afro-Asiatic languages is not a new one. It goes back at least as far as John Davies (1632), who connected Welsh and Hebrew in a prescientific, romantic fashion. The following words (cited from Jongeling 1995:135–136) capture the flavor of Davies' view:

This language [Welsh] seems to me to be of a genius so different from all the European and Western languages . . . that there is not the slenderest foundation for thinking that it may be derived from them. And I am best pleased with their sentiment, who deem it to have taken its rise from Babel. It is my opinion that it is one of the oriental mother-tongues, or at least immediately sprung from these . . .

Davies was of course arguing for some sort of genetic connection between Welsh and Hebrew, a position much different from what V is arguing. For a dramatic articulation of the idea that Welsh and its Insular neighbors were influenced rather than descended from Afroasiatic languages we move forward to the beginning of the last century, when John Morris Jones, a specialist in Welsh language and literary studies who is best known for *A Welsh Grammar, historical and comparative* (1913), wrote a chapter which appeared as an appendix to a book edited by John Rhys (who had made similar suggestions about Pictish earlier) and D. Brynmor-Jones entitled *The Welsh People*. In this chapter Morris Jones proposed the following scenario, which is rooted in 19th century anthropological theory (1900:617 et seq.):

The neo-Celtic languages, then, which are Aryan in vocabulary, and largely non-Aryan in idiom, appear to be the acquired Aryan speech of a population originally speaking a non-Aryan language. [. . .] These non-Celtic inhabitants of Britain are believed by anthropologists to be of the same race as the ancient Iberians and to have migrated through France and Spain from North Africa, where the race is represented by the Berbers and ancient Egyptians. [. . .] If the Iberians of Britain are related to the speakers of these [Hamitic] languages, it is natural to expect that their language also belonged to the Hamitic family—in other words, that the pre-Aryan idioms which still live in Welsh and Irish were derived from a language allied to Egyptian and the Berber tongues. And if there is evidence that this is so—if we find, on comparison, that neo-Celtic syntax agrees with Hamitic on almost every point where it differs from Aryan, we have the linguistic complement of the anthropological evidence, and the strongest corroboration of the theory of the kinship of the early inhabitants of Britain to the North African white race.

Here Morris Jones is arguing for a Hamitic-speaking substratum which is imposed upon by a Celtic (Aryan)-speaking superstratum. V develops this position by arguing that Semitic languages influenced (substratally) the arriving Indo-European languages of the Atlantic seaboard of northwest Europe from the fifth millennium BCE onward. This

position is supported by Pokorny (1927–1930, 1949) as well as Gensler (1993-non vidimus) and elsewhere by V.¹¹ V suggests that these Semitic influences on Celtic may have lasted into the Phoenician period. He asserts (594):

From about 5000 BC onward, Semitic peoples, bearers of the megalithic culture, moved north along the Atlantic coast to all the islands and up the navigable rivers as seafaring colonizers, until they reached southern Sweden in the middle of the third millennium. . . . At the dawn of history we find the western Mediterranean dominated by Phoenicians, a Semitic people. . . . I assume the megalithic culture to have spread along the Atlantic coast from the south and west of the Iberian Peninsula and France (5th millennium) via Ireland and Britain (4th millennium) all the way to Sweden (3rd millennium) and thus to have its origin in the coastal regions between the western Mediterranean and the Atlantic, where I locate the homeland of the Semitic peoples.¹²

Since V identifies the Phoenicians among the likely Semitic-speaking travelers who have introduced their language and culture along the Atlantic coast, it might be useful to point out a few of the known characteristics of these people, since little is known about possible earlier Atlantic settlers. The Phoenicians were seafaring Semitic-speaking traders from the area of what is now the coastal plain of Lebanon and Syria. They established settlements all over the Mediterranean, in Cyprus, Greece, Malta, Sicily, Sardinia, Southern France, Southern Spain, and above all, North Africa (Hetzron, 1987b:656). Comprising more than just a group of traders, Phoenician society was highly literate and complex. Phoenicians left behind relics of their institutions everywhere they visited—temples, figurines, some art, and most importantly for the present discussion, inscriptions (the Phoenician script is the direct ancestor of the Greek and Roman alphabets). Everywhere the Phoenicians went they seemed to write something down, the earliest inscription stemming from Byblos and dating to ca. 1000 BCE. This is a problem for such northerly settlements as V proposes for them because there are no Phoenician inscriptions north of central Spain, none on the British Isles or Scandinavia, and none so early as would be required for the scenario which V envisions for these locales. This is not to say that they (Phoenicians or some other Semitic-speaking travelers) might not have visited these places, nor are we denying that Semitic-speaking people may have been responsible for the megaliths found in the northern European area,¹³ only that their linguistic influence could not have been so great if there was an insufficient presence there to establish linguistic monuments. And in any case, V does little more than assert his assumptions on the Phoenicians and other Atlantics rather than to establish them with firm linguistic evidence. On this matter we cannot accept V's postulation of such highly disputed attributes of material culture or folklore such as the Vanir myth or for that matter the megaliths themselves to the Atlantic peoples as acceptable substitutes for direct linguistic evidence, specifically inscriptions.

¹¹ This position should be clearly distinguished from V's central European theory, in which he suggests that the Semitic languages applied a superstratal influence on Germanic.

¹² An anonymous *Lingua* reviewer points out that many of the problems of V's theory result from his ambitious chronology and suggests that a more limited time span, say 1500–1000 BCE, would avoid many of the problems with the megaliths and the lack of inscriptions without damaging the Semitic theory.

¹³ Though dating is a problem; see below.

Furthermore, for Semitic-speaking settlers to be responsible for such monuments as the megaliths they would have had to be in a powerful elite position, controlling everyone who would be responsible for the construction of the monuments, just as with the Egyptian pharaohs. Such control would require an elaborate, probably sedentary monarchical society with a significant population, for which there is no external evidence (beyond the megaliths and the purported linguistic effects of Semitic on Germanic and Celtic) in the early period relevant for this proposal. In any case, the northern megaliths cannot be dated much before the Late Bronze Age (ca. 1500–800 BCE).

V's archaeological and migration scenarios require that Celts be in the British Isles already by the 5th millennium BCE. But traditional views of the settlement of the Celts places them in the British Isles no earlier than about 2000 BCE, much too late for V's scenario. Mallory (1989:106) locates them in the British Isles even later:

General opinion, therefore, traces the earliest historical Celts back to the continent and the La Tène culture, or to its immediate predecessor, the Hallstatt culture, at least in Western Europe. Since it is with little difficulty that archaeologists can trace the Hallstatt back to the Urnfield culture (1200–800 BC) or yet earlier periods, some prehistorians have glibly asserted that a 'Proto-Celtic' culture can be discerned all the way back to the Early Bronze Age. This can be done, however, only if one maintains a blissful ignorance . . .

In fairness to V's chronological scenario, it must be pointed out that other prominent archaeologists such as Renfrew have argued for a much earlier Celtic settlement, perhaps as early as 4000 BCE (1987:249), though more recently (1999:284–285) he places Proto-Celtic later, sometime after 3000 BCE (similarly Germanic). The early date would seem to fit with V's view of the Celtic population of the British Isles. But V's view of the establishment of the megaliths by Semitic settlers is not supported by Renfrew or other mainstream archaeologists. Renfrew (1987:31) states that the megalithic tombs characteristic of parts of western and northwestern Europe from Iberia to Britain to Denmark probably have a local European origin, though he allows that they are a puzzle that still needs to be resolved.

V's entire archaeological premise is constructed around a view of the Indo-Europeanization of Europe which assumes a much earlier time horizon than most scholars are willing to support, Renfrew and Gamkrelidze-Ivanov (1995) being the most noteworthy exceptions (4500 BCE seems to be the upper limit for those who do not embrace the Anatolian theory in one form or another, though a much later date of ca. 2500 still has its adherents). And it must be pointed out once again that the archaeological premises which V assumes are not based on archaeological evidence per se, but rather are derivative of V's theory of Semitic influences on northwest IE languages. For a summary review of the homeland issue, see Lehmann (1993:283–288), who opts for the southern Russia homeland.

2.2. *The Semitic substratum in Celtic*

In his remarkable paper on "Pre-Aryan syntax in Insular Celtic" (1900), Morris Jones identifies a number of constructions which he attributes to a Hamitic substratum. An

important issue addressed by V, without data but with acknowledgment of Pokorny, who does assess the data, is the matter of dominant word order in Insular Celtic in comparison with that of other ancient IE languages.¹⁴ The issue of word order in PIE is famously tricky, and we will make no attempt to resolve it here. Proposals have been made for all the primary word orders (SOV, SVO, VSO), and each has its merits. V is right to claim, however, that verb-final order (prespecifying in his terminology) is certainly dominant in the ancient IE languages, and that V-initial (postspecifying), as found in Insular Celtic, is certainly unusual from the IE perspective. Morris Jones proposed, and Pokorny agreed (as does V) that the verb-initial pattern of Insular Celtic is due to the “pre-Aryan” (=Semitidic) substratum, since Proto-Semitic (and later Berber, Egyptian and others) was most likely V-initial (Hetzron, 1987b:662). It is a natural conclusion in a contact-based theory that the V-initial structures of the Insular Celtic languages are due to Semitidic influence. But just as there are examples of unusual coinages or lexical structures which have been internally generated in the history of languages, so too one can find parallel cases of word-order changes in languages which have taken or are taking place without any contact influences.¹⁵

This is particularly true in the case of Insular Celtic. Eska (1994) argues that the change from V-noninitial word order in Continental Celtic to V-initial in Insular Celtic is internally motivated. His argument relies crucially on early attestations of verb-initial sentences in Continental Celtic. A Celtic variation of Wackernagel’s Law known as Vendryes’ Restriction required that pronominal objects move to second position together with pied-piping of the verb to initial position. Eska also finds examples of verbs fronted for pragmatic purposes and V-initial imperatives in ancient Continental Celtic texts. He argues that V-initial order was generalized subsequently in Insular Celtic.

When we consider also the pressures of typology and the alignments and changes which can result from typological cohesion within languages,¹⁶ we are obliged to admit that contact is only one explanation, and because it is so difficult to establish with any certainty for such a distant period as we are discussing here, we conclude that it will probably never exceed the bounds of hopeful theory. This holds not only for the word-order argument, but for the other contact-induced structural effects elaborated by Pokorny, critically evaluated by Jongeling, and endorsed by V, here (xix–xxii) and elsewhere (e.g. 2002a, 2002b).

But the strength of V’s proposals for Semitidic substrate influence lies in his lexical proposals, and these deserve serious consideration. We begin with an evaluation of V’s position on British place names. Part of V’s theory seeks to establish an Atlantic or Vasconic basis for some British place-names. The theory rests in part on the identification of the mysterious Picts. Information on the Picts, the “barbarians” who lived in what is

¹⁴ Other non-lexical issues raised by Morris Jones are personal suffixes, periphrastic conjugations, the behavior of specific prepositions, pleonastic suffixes after prepositions, amplified negatives, parallel behavior of nominals with certain numerals and one phonological parallel (discussed by V in a different context), namely the disappearance of “Aryan” *p* in Welsh and Irish, paralleled by its rarity in Berber.

¹⁵ As proposed for IE languages by V himself in seminal papers on word order change from SOV to SVO, viz. 1974, 1975.

¹⁶ Shisha-Halevi (2000) demonstrates the typological similarities (without contact or genetics) between cleft sentences in Celtic and Ancient Egyptian (as well as Coptic). See also Isaac (2001) for a similar demonstration of non-genetic parallels.

modern day Scotland and who so often ravaged the Britons from the north, is somewhat scarce.¹⁷ The origins of the Picts, and the nature and classification of their language “Pictish” are vexed questions in Celtic scholarship. Texts are rare and fragmentary, as is archaeological evidence which might illuminate their lifestyle. The terms “Picts” and “Pictland” were used to designate the inhabitants and the area up until about 900, when the country began to be called “Alba.” Interestingly, and unfortunately, there is no term in Pictish for the Picts, so we have no idea what they called themselves.

Linguistically Pictish has been variously identified in the literature as non-Indo-European (in one proposal it is called an Iberian language related to Basque), as Indo-European but non-Celtic (e.g. a language connected with Illyrian), as *Q*-Celtic (Goidelic), as *P*-Celtic (Brythonic), and as two independent systems, one Celtic and one not. For V, the very indeterminacy of the extant material provides the perfect scenario in which to look for Atlantic or Vasconic contact influence. In chapter 11 of this volume (“Atlantiker in Nordwesteuropa: Pikten und Vanen”, pp. 371–395, esp. 373–382; also chapter 15 “Pre-Indo-European toponyms in Central and Western Europe: *Bid-/Bed-* and *Pit-* names”, pp. 473–478), and chapter 18 (“Andromeda and the apples of the Hesperides”), V advances the position that the Picts were indeed Atlantic people, or at least speakers of an Atlantic language. He says (363, n. 8): “Pictish may be the only Atlantic language that survived into historical times”; (480): “the last Atlantic language, Pictish, survived until the 10th century in northern Scotland”; and finally (593): “. . . Pictish was the last survivor of the Atlantic languages”. V’s evidence is based on toponyms (see below); mythological names (e.g. Pictish *Nehton* = *Neptune*, ultimately connected by Plato with the founding of the Atlantic empires)¹⁸; lexical connections with Germanic (e.g. Old Gaelic *maq* “son” = Goth. *magus* “son (of maternal lineage)”, which establishes the joint Atlantic influence V argues for in Celtic and Germanic. To these data V adds a proposal (377 et seq.), following a suggestion by Jackson (1955:140) that a form prefixed to a name on the St. Vigean’s stone might mean “son of”, an interpretation V adopts via a connection with various Afroasiatic forms for “son” such as the rare Akkad. *bīnu*, also Hebr. *bēn* and Epigraphic South Arab. *bn*, Arab. *ʾibn*¹⁹; stylistic connections with art of the Near East; connections with various folktales which contain “protagonists of a romance featuring an exceedingly non-Indo-European adulteress” (371). This is a typical example of what we noted above as V’s use of non-linguistic material to supplement the general scarcity of conclusive linguistic evidence. He elaborates on the Vanir myth too, uncovering Mediterranean features in this Germanic tale as a way of demonstrating Atlantic contact. In this regard he is certainly not alone, nor is he in poor company. Zimmer (1898), who considered Pictish to be essentially non-Indo-European, drew his main evidence from the Pictish customs of tattooing and matrilinear succession. For a review of the arguments on Pictish origins see Wainwright (1955); for the linguistic evidence, including much of that discussed by V, see Jackson (1955).

¹⁷ Though by the time of Bede (673–735 CE) they formed a definite kingdom (Wainwright 1955:5).

¹⁸ *Nehton* may also reflect a borrowing of Old Irish *Neachtan* (Joseph F. Eska, personal communication).

¹⁹ The more common Akkadian word for “son” is *māru*. Furthermore, Akkad. *bīnu* occurs only in Old Akkadian (3rd millennium BCE) anthroponyms, and has restricted distribution after that.

V sets the Atlantic background of the Picts to use in his linguistic arguments concerning the element *Pit-* in *Pit-*names, which are part of his larger position on British place-names.²⁰ The *Pit-*names appear in more than three hundred names such as *Pittenweem*, *Pitochry*, *Pitsligo*, *Pitbladdo* and so on, and have been the subject of acute controversy (see the map in Watson, 1926, reproduced in Jackson, 1955:147). The *Pit-*words were connected by Jackson with other Celtic forms (1955:148), suggesting a Celtic *pett* “parcel of land or farmland”. It is restricted to Celtic and a few Latin borrowings, and is otherwise unknown in IE languages. V seizes this distribution to connect it with a Hamito-Semitic root **fit-* “land” as reconstructed by Orel and Stolbova (1995, no. 809). He proposes a link with the Semitic **pitt-* “area, region”, manifested prominently in Akkad. *pittu* “area, vicinity”. Working this in with some other Afroasiatic data from Cushitic and Omotic, V concludes that “Whatever the details of the relationship of these words within Afro-Asiatic may turn out to be, my impression is that this set of correspondences confirms the thesis that *pett-/pit-* in the *Pit-*names continues a native Pictish word, and also the superordinate thesis that Pictish was related to Semitic” (502).

It would be quite easy to criticize V on such a proposal—one might begin by repeating the documented deficiencies of Orel and Stolbova (e.g. Diakonoff and Kogan, 1996; Kogan, 2002) and reject the proposal as phonologically unsupported by other examples; or one might reply with the classic dismissive *obscurum per obscurius*. Our reaction is more measured. To begin with, the specific detail of the initial consonant of the reconstruction (**f* or **p?*) is probably irrelevant for the general etymological equation, which comes into Celtic with initial *p*.²¹ More troubling is the sporadic nature of the likely Atlantic comparanda. This inconsistency is highlighted by the fact that so much of the Afroasiatic material is from different periods, or is based on reconstructions (faulty or otherwise). For example, the Akkadian comparandum for the *Pit-*words must come from a period which is considerably later than V’s Atlantic scenario suggests, perhaps as many as 2000 years from the time that V has Atlantics in the British Isles. And one must confess that when V talks about “correspondences” between Atlantic and

²⁰ V’s proposals for Atlantic-based place and water names include, in addition to the *Pit-*names, the name of the strait *Solent* (England), the island *Solund* (Norway), and the *Isles of Scilly* (in the Atlantic off the southwest coast of England), which he derives from Sem. **sl̥* “rock, cliff” (following Coates, 1988); the rivers *Tay* (Pictland/Scotland), *Taw* (England) and several Spanish/Portuguese river names (*Tajo*, *Tejo*), which he connects with a putative, but apparently non-existent Hausa form *tagus* “river (with an estuary)”, the only time Hausa is invoked in an Atlantic etymology (after Stumfohl, 1989; non vidimus); and the *Pit-*names, and others (on which see Sheynin’s 2004 critique). Examples of appellatives include administrative labels such as the “ruler” word (Germ. *Adel*, OE *ædel-*), which V connects with Hebr. *ʾsyly* (more properly *ʾāšīl*) and Arab. *ʾatālun* (and *ʾatīlun*) “noble, nobility, etc.”, though the cognacy of the Hebrew and Arabic forms is in doubt because of the */s̥/-/θ/* correspondence; and the Gmc. **sibjō* “family” (Eng. *sib*, Germ. *Sippe*), which V relates to the Semitic root **šph̄* “family” (this root occurs only in Northwest Semitic, viz. Ugaritic *šph̄*, Phoenician and Punic *šph̄*, and Hebr. *mišpāhāh*). For general critique see Kitson (1996), who reasserts the Indo-European character of most of the place names analyzed by V in his critique of one of the best-known of the chapters V has devoted to the topic, namely V 1994 (chap. 6 of this volume).

²¹ Of course it is reasonable to ask what happened to this *p* given the fact that Celtic eliminates initial *p* from PIE. As a loanword it may have behaved differently, though at this early date one should expect it to be subject to normal phonological developments.

Celtic names it does make one search for the patterns and the consistencies, not many of which emerge (for example, we fail to find another Semitic word with initial **p*, or **f*, to match up with its Celtic receptor language). But do such deficiencies, perceived or real, negate the hypothesis? In fact the proposal to align Pictish with Semitic is first of all consistent with V's overall theory, which is rooted in contact, an irregular process at best. Second, it addresses the many doubts and general uneasiness about Pictish held by generations of Celticists, who have not quite succeeded in finding the key to the "Pictish problem". Of course to convince skeptical scholars, many with more detailed specialist knowledge about the languages on which V is basing his proposals, V and those who support the theory will have to provide other pieces of the Atlantic/Celtic puzzle. And it surely does not help V's theory that so much of the linguistic basis is founded on speculative archaeological and cultural parallels. But let's give V his due: this may not be right, but it is at least more consistent than what has gone before.

2.3. *The Semitic superstratum in Germanic*

V has rightly taken a closer look at the widely held view that a substrate is responsible for the non-Indo-European portion of the Germanic lexicon. V (1) observes that a variety of lexical items with no known cognates outside of Germanic can be divided into the following semantic fields: 1. warfare and weapons (*sword*), 2. sea and navigation (*sea*), 3. law (*steal*), 4. state and communal life (*folk*), 5. husbandry, house building, settlement (*house*), 6. other expressions of advanced civilization (Germ. *Zeit* "time"), 7. names of animals and plants (*eel*), 8. expressions from numerous spheres of daily life (*drink*). He argues that it is highly unlikely that the pre-Germanic people would have borrowed the lexical items in categories 1, 3, and 4 from a substrate population of hunter-gatherers. Analogies are drawn from numerous contact situations in which a superstrate language influences the lexicon of the recipient language precisely in those semantic fields (see also in this vein Polomé, 1986). Examples given by V include Norman French borrowings in Middle English, Frankish lexical influence on the development of French, Gothic and Arabic loanwords in Spanish, Langobardic and Gothic loanwords in Italian, Turkish loanwords throughout the Balkans, and Middle Low German loanwords in Danish and Swedish.

Though V's argument is consistent with Thomason and Kaufman's (1988:212) observation that "the major determinants of contact-induced language change are the social facts of particular contact situations," his continued use of the traditional terms superstrate, adstrate, and substrate is problematic. As noted earlier in 1., V (521) states that superstrates influence mainly the lexicon whereas substrates influence mainly the structure of the borrowing language. Recent work has found that the dichotomy between language shift and language maintenance is the most crucial social factor determining the outcome of language contact (Thomason and Kaufman, 1988; Van Coetsem, 1988). Thus, Thomason and Kaufman replace the superstrate/substrate paradigm of language contact with the distinction between borrowing and shift-induced interference. Borrowing pertains in language maintenance situations when L1 speakers may incorporate lexical items or structural features from an L2. In cases of language maintenance, borrowing of lexical items may occur even in cases of casual contact whereas borrowing of structural features

requires a much greater intensity of contact.²² In shift-induced interference, L2 speakers are imposing structural features of their L1 onto L2. In a similar vein, Van Coetsem (1988, 2000) also rejects the substrate/superstrate dichotomy and emphasizes the crucial role of agentivity in language contact. He refers to the incorporation of L2 linguistic material by speakers into their L1 as recipient-language agentivity, whereas the imposition of L1 features onto an L2 is called source-language agentivity. Van Coetsem (2000) also describes contact areas characterized by long-term, stable bilingualism that lead to the convergence of structural features.

Following the insights of Thomason and Kaufman (1988) and Van Coetsem (1988, 2000), issues concerning language contact and its role in the development of Indo-European in northern and western Europe take on a different cast. As V (26–27) points out, Germanic is in many ways very conservative. Its morphology and phonology are readily identifiable as Indo-European, suggesting that the transition from Indo-European to Germanic is characterized by language maintenance. The relative lack of structural divergence from Indo-European indicates that any language shifts to pre-Germanic must have involved comparatively small non-Indo-European populations. At this point in his analysis, however, V makes two related assumptions that we consider to be questionable: (1) the loanwords were borrowed from a technologically superior culture and therefore (2) hunter-gatherers could not be the source of cultural loanwords.

All the allegedly analogous situations outlined above, with the exception of Low German, involve subjugation of an indigenous population by an invading group. On this basis, V argues that the lexical items in categories 1, 3, and 4 above must have been borrowed from the language of a superstrate, or possibly adstrate, population that subjugated the pre-Germanic population. The Low German situation points to trade as another vehicle for the introduction of cultural loanwords, as Low German was the language of the Hanseatic League, a trading federation centered in the Baltic, and not the language of a conquering people. On the basis of these presumed parallels, V attempts to identify a likely superstrate in northern Europe at the time of Indo-European settlement. He points to the one hundred meter long West Kennet Long Burrow dated to 3250 BCE and other large structures as indicative of an advanced society that could serve as a superstrate to relatively primitive Indo-Europeans (16–17). In numerous articles, V argues that Semitic speakers formed the superstrate that provided Germanic with the non-Indo-European portion of its cultural vocabulary.

V clearly adopts the traditional view that a Mesolithic hunter-gatherer society would be less hierarchical and involve simpler social relationships than a Neolithic farming society. Therefore, V assumes that the indigenous population constituted a substrate and could not be responsible for cultural loanwords found in Germanic. In other words, the indigenous hunter-gatherers would lack anything of cultural significance or value to the intruding Indo-European farmers.²³

²² According to Thomason (2001:66), factors determining intensity of contact include the duration of time the languages are in contact, the relative number of speakers of the two languages, and the degree of bilingualism in the borrowing population.

²³ On the matter of cultural advancement and linguistic borrowing, the following are useful: Huld (1990), Beekes (1997), Boutkan and Kossmann (1999), Rubio (1999) and Rubio (forthcoming).

Recent work in archaeology and anthropology challenges the hypothesis that Mesolithic hunter-gatherer societies are less complex than agricultural societies. In his ethnography of the Mesolithic Ertebølle culture in southern Scandinavia, Tilley (1996:57) states that in current research “a realization has developed that some hunter-gatherers are more socially “complex” than many supposedly more culturally “advanced” farming populations.” In evaluating late Mesolithic evidence from southern Scandinavia, Tilley (1996:59) concludes: “This was an affluent society in which food resources were plentiful, populations at least semi-sedentary, technologies complex, social and ritual relations and cosmological ideas elaborate.” Tilley also argues that this late Mesolithic culture in Scandinavia was not patriarchal but that “[g]ender inequalities in terms of roles, status, prestige, and power were not pronounced and same-sex and cross-sex relationships were essentially egalitarian.” Moreover, this egalitarian Mesolithic society co-existed with their farming neighbors to the south for an extended period of time. We find the following statement by Tilley (1996:69) particularly interesting in light of V’s superstrate arguments:

This society survived in Skåne and Denmark for over a thousand years despite the knowledge of agriculture acquired through exchange links with southern farmers. The Ertebølle Mesolithic populations fiercely maintained and guarded their social, political and economic integrity. There was no reason to farm and no reason to accept the ideological baggage associated with such a mode of subsistence.

Tilley’s work calls into question the very basis of V’s arguments and highlights the difficulty in developing theories about prehistoric language contact based on linguistic evidence when we know relatively little about the populations involved. Given V’s identification of the Indo-Europeans with the spread of farming to northern Europe and Scandinavia, it is not at all evident that the Germanic non-Indo-European lexicon is attributable to a superstrate. The indigenous population that greeted the Indo-Europeans could well have had a rich culture full of potential loanwords dealing with warfare, law, and communal life. More recently, English has adopted loanwords from Native American languages related to numerous aspects of Native American culture. Some examples include *wampum*, *canoe* from Arawak via Spanish and French, *totem*, and *wigwam*. In the case of prehistoric Scandinavia, the indigenous population apparently resisted domination by their farming neighbors. Their long-term co-existence and trading relationship may have led to a situation in which a number of loanwords, both cultural and natural, were adopted by the farming population. Moreover, the subsequent emergence of the Megalithic culture in Scandinavia could mark a synthesis of the Ertebølle culture with that of the southern farmers. Assuming the early farmers were Indo-Europeans, this synthesis could be represented by the clash between the Vanir and Aesir in Germanic mythology, with the Vanir preserving the cosmology of the non-patriarchal Ertebølle culture.

We are not arguing that this is in fact the case, nor do we necessarily accept the view that Indo-Europeans introduced agriculture to Scandinavia. Rather, our purpose is to show that it is relatively easy to construct alternative scenarios based on limited knowledge of the archaeology and anthropology of Mesolithic and Neolithic Europe that account for the non-Indo-European portion of the Germanic lexicon.

V also finds support for Semitic influence in Germanic morphology. As stated in the introduction (xix), “Germanic ablauting verbs have been lexically enriched and grammatically systematized and functionalized by the Semitic-speaking peoples, ablaut being a central and morphological device in Semitic.” [Though one with a different internal history from that of IE ablaut, PB, BRP]. In particular, V points to the regular use of $e \sim o \sim \emptyset$ ablaut alternations to mark present tense, preterit singulars, preterit plurals and past participles. Though often obscured by sound changes, this ablaut pattern is reflected in alternations such as Goth. *kīusan* “to choose” \sim *kaus* “choose 1 sg. pret.” \sim *kusum* “choose 1 pl. pret.” \sim *kusans* “choose past prt.” He also notes that many Germanic strong verbs contain reflexes of PGmc. *p* (< PIE *b*), which is highly problematic given the rarity of PIE *b*. Examples appear in (1.):

(1.) Germanic strong verbs with PGmc *p* (V 574)²⁴

Class I	<i>grīpan-</i> “grip”, <i>slīpan-</i> “glide”, <i>wīpan-</i> “wind”
Class II	<i>sleupan-</i> “slip”, <i>dreupan-</i> “drip”, <i>sūpan-</i> “drink”
Class III	<i>krimpan-</i> “cramp”, <i>limpan-</i> [OE <i>limpan</i>] “to befit”, <i>rimpan-</i> “rumple”, <i>helpan-</i> “help”, <i>werpan-</i> “warp”
Class IV	<i>drepan-</i> [OE <i>drepan</i>] “to kill”
Class V	<i>plegan-</i> [Ger. <i>pflügen</i> “to play”]
Class VI	<i>lapan-</i> “lap”, <i>skapjan-</i> “shape”, <i>stapjan-</i> “step”
Class VII	<i>slēpan-</i> “sleep”, <i>swaipan-</i> “sweep”, <i>hlaupan-</i> “leap”, <i>hrōpan-</i> [OE <i>hropan</i>] “to shout”, <i>h^wōpan-</i> [Goth. <i>hwopan</i>] “to boast”

The rarity of PIE *b* is indeed striking and was noticed very early in the history of Indo-European scholarship by Schleicher among others (Szemerényi, 1985; Villar, 1991: 183–187; Woodhouse, 1995; Lehmann, 1993:97). To our knowledge, V is the first to point out the relatively great number of Germanic strong verbs with a root ending in PGmc. *p* (<PIE *b*). We find this disparity to be compelling evidence of language contact. In Rix’s (2001) monumental *Lexikon der indogermanischen Verben*, he lists only 11 possible Proto-Indo-European verbs with a root ending in PIE *b* in a corpus of 1182 reconstructed verbal roots. A table showing the occurrence of reconstructed PIE plosives occurring root-finally in verbs is given in (2.).

(2.) Occurrence of root-final plosives in reconstructed PIE verbs (Rix, 2001)

	Labial	Root- final	Dental	Root- final	Palatal	Root- final	Velar	Root- final	Labio- velar	Root- final
voiceless	p	47	t	40	\widehat{k}	39	k	73	k^w	13
voiced	b	11	d	90	\widehat{g}	25	g	66	g^w	15
voiced aspirated	b^h	37	d^h	56	\widehat{g}^h	25	g^h	31	g^{wh}	9

²⁴ Forms as cited by V, with our additions in [brackets].

V's observation that Germanic has a greater than expected number of strong verbs with reconstructed Gmc. *p* root-finally finds support in the eleven verbs with root-final PIE *b* (> Gmc. *p*) listed in (3). Of the 11, nine are attested in Germanic with only sparse attestation outside of Germanic. Of these nine, Rix considers four to be of questionable origin, including **d^hreb-* “to strike”, **sleh₁b-* “to sleep”, **sleǵb-* “slide”, **d^hreyǵb-* “to drip”. The eleven are listed below. If one were to ignore the Germanic attestations of putative PIE *b* in root-final position, it would be virtually non-occurring. Regardless of whether an individual Germanic strong verb with Gmc. *-b-* can in fact be traced back to PIE, it is clear that a sizable number of the Germanic verbal roots identified by V must be non-IE in origin. The question is whether V's claim that they are loanwords from a Semitic superstrate or adstrate is convincing. We find the evidence marshalled by V to suggest otherwise.

(3.) Roots ending in reconstructed PIE *b* (from Rix 2001)²⁵

a. Attested only in Germanic (5)

PIE *?*sleǵb-* “to slide”

OHG (+) *slīfan* “to slide”

PIE *?*d^hreyǵb-* “to drip”

ON (+) *drjúpa* “to drip”

PIE *?*d^hreb-* “to strike”

ON (+) *drepa* “to kill”²⁶

PIE **(s)kerb-* “to shrink”²⁷

MHG *schrumpfen* “to shrink” (reflects nasal present-tense infix)

PIE **kleǵb-* “to stumble, to hop”

ON(+) *hlaupa* “to run, jump”²⁸

b. Secure attestations only in Germanic (1)

PIE **seǵb-* “to let flow”

Middle Dutch (+) *sīpen* “to drip”, ?Gk. εἶβω “to let flow”, ?Toch. A *siptār* “?”.

²⁵ We follow Rix and use “?” to indicate whether a proposed PIE etymon or a potential reflex in a daughter language is problematic. The symbol “+” indicates attestation elsewhere within the subfamily, e.g., “ON (+)” indicates that there are also cognates in Germanic languages other than Old Norse. We have modified Rix's lists by taking account of Winter's Law, which states that short vowels before Indo-European plain voiced stops lengthen in Balto-Slavic (Winter, 1978). In Baltic, the lengthening also applies before sequences of resonant plus voiced stop. One should note that the precise formulation of Winter's Law is a matter of ongoing debate. Matosovic (1995) argues that the lengthening is limited to open syllables. We wish to thank an anonymous reviewer for pointing out the applicability of Winter's Law to these forms.

²⁶ Rix also mentions OCS *drobljǫ* “to splinter” as a possible cognate to ON *drepa*. This would run counter to Winter's Law.

²⁷ We have excluded Lith. *skrembù* “to shrivel up” since it retains a short vowel where Winter's Law requires the vowel to be long.

²⁸ Rix's list of possible cognates includes Lith. *klumpù* and *klumbù* “to kneel down, stumble, fall” (reflecting nasal present-tense infix). We view these forms as problematic. The medial *p* in Lith. *klumpù* does not correspond with Gmc. *p* reflected in ON *hlaupa*. In Lith. *klumbù*, one would expect a long acute vowel according to Winter's Law.

c. Secure attestations in Germanic and elsewhere (3)

PIE **(s)kreb-* “to scrape, scratch”

OE *screpan*, Welsh *craf-* “to scratch”²⁹

PIE *?*sleh₁b-* “to be slack”

Goth. (+) *slepan* “to sleep”, Lith. *slobstù* “become weak”

PIE **uremb-* “to turn”

MLG (+) *wrimpen* “to turn up (one’s nose)”, Gk. *ρέμβομαι* “to roam around”

d. Not attested as a verb in Germanic (2)

PIE *?*g^heHb-* “to take”

Umbr. *habetu* “should have”, Lat. *habēō* “to have”, OIr. *-gair* “to take”

PIE *?*steib-* “to stiffen, make fast”

Gk. *στειβω* “to crush (underfoot), to tread firmly”, ?Arm. *stipem* “to force”,

?Lith. *stiebiù* “to stretch, lift up”

V (573–574) makes particular mention of the great number of class VII verbs that have an unknown etymology and have a reconstructed Gmc. *p* in the root. We see this evidence as highly problematic. Class VII verbs in Germanic are reduplicating. Moreover, some class VII verbs do not exhibit ablaut in the stem while others do. For example, in Gothic the preterit singular form of *slepan* “to sleep” is *saislep*, or the possible Verner alternate *saizlep*, with no change in the stem vowel (in Gothic the reduplicating syllable generally consists of the initial consonant of the stem plus orthographic <ai>). Given V’s assumption that Semitic is historically implicated with these strong verbs and that it facilitated the regularization of ablaut, one must ask why there is such an abundance of Class VII reduplicating verbs with *-p-*, especially when some of these do not exhibit ablaut. In an article not included in the present volume, V (1994) argues that reduplication in class VII occurred in all branches of Germanic, but it was subsequently lost in North and West Germanic and replaced with ablaut. We fail to see how this accounts for the concentration of putative loanwords with *-p-* from ablauting Semitic in reduplicating class VII.

Rather than attribute the regularization of ablaut to contact with a Semitic superstrate, we find it far simpler to view the Germanic strong verb system as the outcome of internal morphological development (see Krahe and Meid, 1967–1969). Regularization of morphological processes is exceedingly common. Given that Sanskrit and Germanic share the same ablaut pattern for many Indo-European verbs (see Verner, 1877), there is no need to posit language contact as a catalyst for the development of the Germanic strong verb system.

Germanic verbal roots ending in Gmc. *p* probably come from three sources: (1) Indo-European, (2) internal local development, and (3) borrowings from an unknown language. Excluding problematic Baltic and Slavic forms, Rix (2001) considers two verbal roots with PIE *b* to be secure and attested in Germanic and elsewhere (see 3c). In this regard, we adopt the standard view that PIE *b* (or its analogue under the glottalic theory) exists but is simply underrepresented (Szemerényi, 1985:6–15). Accordingly, the two roots with PIE *b* that are securely attested in Germanic and elsewhere are most likely Indo-European in origin. In addition, as noted by V, some of the verbs with Gmc. *p* may be attributable to sound

²⁹ We omit Lith. *skrebù* “to scrape” and Russ. *skrebu* “to scrape” from Rix’s list because of Winter’s Law.

symbolism or may be otherwise a Germanic coinage. As mentioned earlier, [Salmons \(2004\)](#) has shown that there are numerous attested examples of such coinages in English, for example *dweeb* and *boink*, that would be candidates for loanwords on the basis of English phonotactics. English is certainly not unique in this regard. We therefore advance the possibility that there were similar, albeit unpredictable, lexical developments in the history of Germanic which resulted in new lexical items with underrepresented Gmc. *p*. Of course, a third source of these strong verbs would be language contact. We agree with V that the Gmc. strong verb system predates the development of the dental preterit. Moreover, following V, we assume that the strong verbal system was at one time regular and transparent in Germanic. At this point in the history of Germanic, a speaker's default assumption would be that a verbal root, including one with Gmc. *p* from a non-IE source, was strong and assigned to the appropriate Germanic strong verb class based on root structure (see V, 568–570).³⁰

2.4. Etymologies from Semitic sources

V has proposed many etymologies of west IE words from Semitic. Some of these are original with him, some are his reformulation of earlier speculations by scholars who believed in an IE/Semitic genetic connection (e.g. [Möller, 1906, 1911](#) and [Brunner, 1969](#)), while others are attributable to Nostratic connections (e.g. [Bomhard and Kerns, 1994](#)). It is important to stress the novelty of V's proposals as resulting from contact rather than from genetic descent.

We cannot of course review every etymology, and offer only a critical sample below. Among the many words which we do not evaluate are “goat”, “ever” (wild boar), “harvest”, “hoof”, “sibling”, “steer” (young ox), “horn”, “calf”, “whelp”, “crab”, “spring”, “endure”, “garden” and the number “seven”. What follows is our assessment of a representative few of V's etymological proposals.

2.4.1. Volk

V argues (665–666) that the quintessentially Germanic word *Volk* “people” (OE *folc*, OFris. *Folk*, OS *folc*, OHG *folc*, ON *folk*) has a Semitic etymology, based ultimately on a root meaning “to split, divide”. The argument rests semantically on the proposal that the original meaning of *Volk* is not “people” but rather “division of an army”. V takes *Volk* back to an Semitic root of the structure **plg* with the basic meaning “to divide” (cf. Hebr. *plg* “to divide”, and with enlargement, *plgh* “section”). V surmises that the word was an early loan which underwent Grimm's Law. V's semantic arguments are based on the concept inherent in the English military term “division”, obviously based on *divide*, Lat. *dīvidere*, that is, a portion of an army that has been segmented from the main body. But the problem here is that Lat. *dīvidere* and its nominalized form *dīvisio* are never used in a military context (*OLD*, s.v.). The notion of a *division* as a part of an army is a modern concept, not an ancient one, first occurring in written English in 1597 in Shakespeare (*OED*, s.v.). In fact, the oldest evidence we have from any military organization for the

³⁰ We recognize that minority patterns can intrude in the creation of new paradigmatic forms as in Eng. *dive* ~ *dove* or *strive* ~ *strove*.

existence of divisions (as evidenced by standards or flags) is from the Egyptian Bull Slate Palette from 2900 BCE, where standards identifying the four units of an army are clearly represented by separate animal designations (see Yadin, 1963:122). By around 1500 BCE Egyptian military units were named after gods. Nowhere in the Indo-European, Near Eastern (or the quite different Egyptian) military tradition is there evidence for a use of the word “division” or anything similar to mark a military unit (cf. Lat. *legio* “chosen body”, *cohors* “company, i.e. those enclosed together”, *manipulus* “handful”; Gk. φάλαγξ “battle line”, originally probably “log, beam”).³¹ While we have no argument with the idea of the notion of “army” becoming “people” (as argued for Lat. *populus* by Harvey and Baldi, 2002, who derive *populus* from the root underlying *pellō* “to strike”; cf. also Gk. λα(φ)ός “people under arms”), we do question the foundations of the “division of an army” meaning from forms deriving from the Semitic root **plg*, largely because of the solid nature of the evidence which argues for an Indo-European basis. One potential etymology of *Volk* (Pokorny, 1951–1959:799–800) treats it as a cognate of Latin *pleō* “to fill” with a number of cognates including Gk. πληθύς, Skt. *pīparti* and many others, all deriving from a root with the basic meaning “fill”, though other derivations are possible. The wealth of comparative data supporting any one of the possible etymologies for *Volk*, not only on structural compatibility (right down to Grimm’s Law correspondences for comparanda like the Alb. *plot*, Lat. *plēnus* to go with the Germanic forms) places V’s etymology very much in doubt on both structural and semantic grounds since so many of the IE words (such as Lat. *plēbs* and Greek πληθύς) have the same meaning as *Volk*, namely “common folk, crowd, people”.

2.4.2. Furrow, Furche

In addition to *folk*, V proposes Semitic etymologies for Gmc. **furh-* “furrow”, **farh-* “farrow”, and **plōg-* “plow”. V (664) notes that Indo-European cognates of *furrow* outside Germanic are confined to the western branch of Indo-European. Examples cited by V include Lat. *porca* “ridge between furrows”, Wels. *rhych* “furrow”, and OIr. *rech* “furrow”. Moreover, the word is not attested in Gothic, all of which motivates V to argue that this distribution is indicative of a loanword. In searching for a source, V cites the Hebrew root *plh* “to furrow, till, cultivate”. He surmises further there must have also been a Semitic root with the form **prh* or **prk* which was borrowed into West Indo-European and nominalized. We are troubled by V’s readiness to conflate roots ending in glottals, pharyngeals, uvulars and velars, which are contrastive and stable in the historical phonologies of the putative donor languages. The same can be said for *r* and *l*.

In contrast to V, Mallory and Adams (1997:215) view *furrow* as Indo-European in origin, although the use of the word for agricultural furrows is found only in West Indo-European. As a further cognate albeit with a non-agricultural meaning, Mallory and Adams (1997:215) cite OInd. *pārsāna-* “chasm, rift.” They reconstruct the PIE form as **p^hkeh_a-* (more standardly **perk-*). We find Mallory and Adams to be convincing (see also Rix 2001: 475). We would argue that the root **perk-* simply shows a different semantic development

³¹ Though numerical designations are common, such as Lat. *centuria* “division of a hundred soldiers”, Gk. Πεντηκοστής “division of the Spartan army”.

in the west than in the east, one agricultural, one not. A parallel exists in another well-known agricultural term, **h₂eġro-* “field”, which has an agricultural connotation in the western languages but not in the eastern ones. As Mallory and Adams suggest (1997:201), this distribution may illustrate an economic dichotomy between the European and Asian branches of the IE world.

2.4.3. *Farrow*

V (664) accepts the oft proposed etymological connection between *farrow* and *furrow*. He cites Kluge (1995; see also Pokorny, 1951–1959:821) with approval, as one who interprets Lat. *porcus*, OCS *prase*, MĪr. *orc*, Lith. *pařšas* as designations for “pig” with the literal meaning “furrower.” V argues that this is consistent with his view that megalithic Semitic society introduced husbandry of swine to northern Europe. Mallory and Adams make the same semantic connection, but see *furrow* and *farrow* as both Indo-European in origin. They reconstruct PIE **pórkos* “pig”, as in “one who creates a furrow-like track while rooting in the earth” (1997:215).

The semantic and phonological correspondences between *furrow* and *farrow* are indeed striking, and we agree that the words share a common etymology. Given the likely identification of Old Indic *pársāna-* “chasm, rift” as a cognate to *furrow*, we disagree with V’s assertion that the evidence supports borrowing from Semitic or, for that matter, from any other language. Instead, we find it more plausible that *farrow* is Indo-European in origin, as is *furrow*.

2.4.4. *Plow*

V (659) notes that the etymology of *plow* is obscure (see Kluge, 1995). He argues that it is a borrowing from Semitic, citing the Hebrew root *plh* “to furrow”. He notes that there is a tight semantic correlation between the root with this meaning and the tool which is used to make furrows. V (661) acknowledges that his proposal requires that the borrowing occurred relatively late, namely after the Germanic consonant shift, since the initial *p* has not shifted to *f*. V argues that this poses no problem since the Atlantic population and language survived for an extended period in Western Europe, until the early Middle Ages in the case of the Picts.

Though the etymological origin of *plow* is indeed obscure, V’s argument is problematic. There is an Indo-European etymon meaning “plow”. Mallory and Adams (1997:434) reconstruct PIE **h_aérh₃je/o* “to plow” (more standardly **h₂erh₃-*) with reflexes throughout Indo-European: MĪr. *airid* “plows”, Lat. *arō* “to plow”, OE *erian* “to plow”, Lith. *ariù* “plow”, Toch. AB *āre* “plow”. Indeed, it is necessary to distinguish two methods for tilling the soil and the respective tools used, the ard and the plow. The Germanic reflexes of PIE **h₂erh₃-* include OE *erian* (Eng. *ear*), OHG *erran*, Goth. *arjan*, ON *erja* and the deverbative forms Eng. *ard*, ON *arðr* “primitive plow used to scratch the earth”. These forms all refer to an early agricultural method for cultivating the soil by which a lightweight plow would scratch the surface of the soil but not turn it over.

In contrast, the use of a heavier plow with a moldboard that served to turn the soil over was not developed until sometime in the Common Era (see discussion in Rösener, 1992:108–111). In most of Europe, the new plow did not replace the

old ard or hook plow before the eleventh century. In fact, it is not clear that Slavic forms such as ORuss., Russ. *plugŭ*, Pol. *plug*, Cz., Slov. *pluh* etc. should be viewed as borrowings from German (The *OED* cites the Slavic forms as loanwords from German, though the archaeological record casts doubt on that analysis; cf. also Vasmer, 1953–1958, s.v.). There is evidence that Slavic peoples were already using the more advanced plows before the spread of German colonization eastward in the medieval period (Rösener, 1992:110).

Though the etymological origin of *plow* is unclear to us, V's proposal is problematic. The existence of an Indo-European etymon for scratch plowing is consistent with V's own assumption that the Indo-Europeans were farmers. The agricultural innovation in Europe of a second technique for plowing early in the Common Era is the apparent motivation for a new term for plowing, the reflexes of which include Eng. *plow*, Ger. *Pflug*. If *plow* reflects a late borrowing of the Atlantic root *plh* as indicated by the retention of initial *p*, one would expect there to be some evidence in the archaeological record of a technologically advanced people of Semitic origin in northwestern Europe in late antiquity and the early medieval period that used the moldboard plow or some other advanced agricultural tool for tilling the soil. V fails to make a compelling argument that this is indeed the case.

2.4.5. *House*

V rejects the Indo-European etymology for “house”, a word which has representation throughout Germanic (OHG, OIc., OFris., OE *hūs*, Goth. *-hūs*) and elsewhere via the inclusion of such forms as Lat. *custōs* “guardian” and Gk. κύστις as possible cognates with various enlargements. This is the perfect situation for V to propose an Atlantic superstratal provenance, namely a pan-Germanic word with a technical meaning which has non-systematic representation in other IE languages. According to V's proposal, the *Haus* word was borrowed at an early period (during the second millennium BCE) into Proto-Germanic. Although he does not develop the argument in the same linguistic detail as he does with other proposals, V supports Kluge-Seebold's assertion that the etymology of the *Haus* word is unclear, and implicitly rejects Pokorny's more elaborated assessment of the word as being part of the PIE root *(s)keu-*, *(s)keu:* *(s)kū-* (*keud^h* in Rix, 2001, s.v.), expanded with various enlargements and other morphophonemic modifications. The Atlantic word V connects *Haus* with is the Akkad. *ḫuṣṣu* “a type of reed hut” (Von Soden, 1965, s.v.). We acknowledge the possibility of a word with a specialized meaning such as *ḫuṣṣu* (it also occurs as a place name, see Black et al. (2000), s.v., and actually derives from a verb meaning “to snap off, break off”, and is cognate with the word for “pebbles, gravel” in several Afroasiatic languages) emerging as the source of this general Germanic word. However, we also note that Akkad. *ḫuṣṣu* has extremely limited distribution with the meaning “hut” in Afroasiatic. Accepting V's typology of loanwords, in which superstrates affect substrates by infusing technical vocabulary, one might expect that if the Atlantic superstrate were going to leave behind a word for “house” at all, it would have been the common word for house, represented across the Semitic landscape (Akkad. *bītu* and a host of other cognates in Hebrew, Aramaic, Arabic, South and North Ethiopic, and others; see Bergsträsser's appendix, 1983:216, Von Soden, 1965, s.v.), rather than a

word of limited distribution with a specialized meaning? Is this an example of an accidental similarity of form and a tenuous similarity of meaning?³²

2.4.6. *Earth*

V proposes a Semitic etymology for the “earth” word (arguments on pp. 254–255, more briefly on 559, 614). The IE etymology of this word is admittedly less than satisfactory, once again requiring several enlargements to accommodate its shifting shape. Germanic is the most heavily represented IE group (OS *ertha*, OFris. *erthe*, Goth. *aírþa*, ON *ǰorð*, OHG *erda* (<*er-t-), but also OHG *ero* < *er-). Supporting data for this complex are OWel. *erw* “field” and other Celtic forms which derive from the *er-*u*- variant, and possibly Arm. *erkir* “earth”. Of particular interest in this etymology is the Greek form ἔρα “earth”, which is linked with the OHG alternate form *ero*, as well as the adverbial form ἔραζε “to earth” and the Hesychian form ἔρεσι-μέτρῃ which he glosses as “earth measurement” (geometry). V argues for a Semitic etymology for the *earth*-word complex. He finds parallels in a variety of Semitic forms, including Akkad. *eršetu*, Hebr. *’éres*, Aram. *’ar’ā*, South Arabian *’rḏ*, Arab. *’arḏun*, all from a Proto-Semitic **rḏ*. V has a phonetic explanation to handle the passage of Northwest Semitic emphatic final *s* (š) to PGmc. **erþō-*, namely that it passed from an emphatic to an aspirated stop then by regular sound change to Gmc. *þ*.³³

While we find V’s structural formulation possible, once again the lack of appropriate comparanda weakens the case. An equally serious objection, however, comes from V’s own typology of loanwords due to contact. Of the eight domains that he lists as areas without IE etymologies none includes a word as basic as the word for “earth”. If as he claims superstrates affect their receptor languages in fields such as warfare, community life and law, how does this word naturally find its way into the Germanic lexicon? Did the Proto-Germanic people need, or want, a word for “earth”, a word so fundamental in the lexicon that its importation from another language implies a sustained period of intimate contact? We point out again that there is no physical or *direct* linguistic evidence for Semitic peoples in prehistoric Germania.

2.4.7. *Army*

Following Brunner (1969: 40, no. 166) V proposes (266) a Semitic etymology for the Germanic word **harja-* “army” represented by OHG, OS *heri*, Goth. *harjis*, OIc. *herr*, OE *here*, all the way to Modern German *Heer*. The word has many other IE cognates as well, including OPruss. *kargis*, Lith. *kāras*, *kārias*, MIr. *cuire*, and critically OPers. *karā*, and Gk. κοίρανος “army leader”. The wide geographical distribution of this word surely suggests IE status, at least as a western IE form, and indeed the Grimm’s Law outcome of a PIE

³² The temptation to connect the *Haus* word with Latin *casa* “house” should be resisted. Despite the seductive similarities between the two, a deeper look indicates that *casa* itself is a loanword unrelated to *Haus*, whatever its origins. With respect to the connection of *casa* and *house*, V states (260) that Atl. *[χ] would correspond with what he calls Paleogermanic *[k^h] (aspirated *k*). This is inconsistent with his proposed borrowing of *folk* from Semitic *plh*. The expected development would be Semitic *h* > Pre-Gmc. *k^h* > Gmc. *h*.

³³ Per litt. V has proposed that the Greek forms ἔραζε and ἔρεσι have been mis-segmented as if from ἔρα-ζε, ἔρε-σι, and proposes instead that the -s- of these forms properly belongs with the root and not with the suffix, reflecting the reflex of Semitic š in Greek.

kor̥jo- “army” argues for PIE status as well. V analyzes the word otherwise, as a borrowing into IE, or at least west IE, from Semitic as represented in Akkad. *qarābu*, Hebr. *q^erāb* “war, struggle” (a likely borrowing from Aramaic according to Wagner, 1966:270), Akkad. *naqrabu* “struggle”, *karāšu* “military camp” (which seems to be of different origin, perhaps even Sumerian; see Black et al., s.v.). Though semantically attractive, at least from the data presented here, the structural issues loom large, specifically the outcome of the Semitic *q* shifting to *h* in Germanic. (In V’s proposed etymology for “crab”, Semitic *q* emerges as *k*; cf. Semitic forms such as Akkad. *aqrabu* “scorpion” (253)). Moreover, the apparent disappearance of the last part of the word, including the *b* (which emerges as *b* in “crab”), is problematic. What remains in the comparison between the IE and the Semitic forms then is one sound, *r*, an insufficient parallel for a convincing etymology.

2.4.8. *Apple*

There are two words traditionally reconstructed for “apple” in PIE, namely the “*malum*” word (Latin, Albanian, Greek and possibly Hittite and Tocharian) and the “*apple*” word, found in Germanic, Celtic, Baltic and Slavic,³⁴ with an Oscan outlier in the place name *Abella*, a city in Campania referred to by Vergil as *malifera* (*Aen.* 7, 740). We will have nothing specifically to say about the *malum* word. The *apple* word is reconstructed in traditional form as **ābel-/abel-*, *ābol-/abol-*, *ab_el-* (Pokorny 1951–1959:1–2); **Hebel-* with laryngeal. Although the *apple* word has correspondences in at least five branches of IE, the word has always invited etymological speculation, if for no other reason than the presence of medial *b*, always a troublesome feature of an IE word; and the *a*, which Hamp (1979) takes as evidence of substrate status for the apple word, realized in northwest IE languages. And of course the existence of two unconnected roots like *malum* and *apple* for the same concept in different parts of the IE world makes one all the more suspicious that one of them might be a borrowing (but see Gamkrelidze and Ivanov (1995), who argue for IE status for *apple* and a cognate in Hitt. *sam(a)lu* “apple”). Proposals have been made for example, for a connection with Arab. *ʾubullatun* “arak, fruits” and Tigré *ʾobāl* “tamarisk”. V supports the Afroasiatic connection, but advances a very different etymological hypothesis, namely that the *apple* word is derived from the Proto-Semitic form **abal-* “genitals”, represented in (Ethiopic) Geʿez *ʾabāl*, Tigré *ḥabəl*, Tigrinya *ʾabal*, Amharic *abal* and Gurage *abal*. The formal aspects of this correlation seem secure, and are in any case more appealing than either the Arab. *ʾubullat-* or Tigré *ʾobāl* as possible comparanda. To accept it one has to acknowledge V’s semantic scenario (620) that the *apple* word was borrowed with the meaning “apple”, and that this original meaning was subsequently lost in the donor language(s), being replaced fully by the metaphorical meanings associated with testicles as items of fruit (e.g. nuts) or as spherical objects (e.g. balls, stones). While conceding the difficulty of the semantic argument initially (to which one might add the fact that the Ethiopic languages also attest the meanings “flesh, body parts, limbs”), V follows with an assertion of his position on the art of etymology (619): “But etymology is the art of the second glance, almost by definition. If the origin of each word revealed itself at first glance, we would not need etymology”.

³⁴ The entry in Mallory and Adams (1997), s.v. includes a much larger set of possible cognates for the *malum* word, specifically from Hittite and Indo-Iranian.

We leave it to the reader to decide if a second glance was needed for this or for other words which V has analyzed in the context of his theory.

3. The Vasconic substratum

The centerpiece of V's theory, and the part that has attracted the most attention, is surely his theory of the Vasconic substrate in prehistoric Europe. The theory of the Vasconic substrate states that pre-Indo-European Europe was populated by speakers of a family of languages whose only surviving relative is modern Basque, tucked away as an isolate between France and Spain in the Pyrenees. The language family is called Vasconic, elements of which surface primarily, though not exclusively, in the toponymy of post-Indo-European Europe.³⁵

To put V's Vasconic theory in focus, it would be useful if we first review the essentials of Hans Krahe's "Old European" ("*alteuropäisch*") hypothesis. In a number of significant publications beginning in 1954 and running up to 1969 (see V's references for a full listing), Krahe proposed that river names which covered the area from the Atlantic Ocean to the Baltic Sea were created prior to 1500 BCE, and predated the formation of the Baltic, Celtic, Germanic, Illyrian, Venetic and Italic branches of Indo-European. Arguing that hydronyms provide evidence of the oldest layers of the lexicon of a language system, Krahe assessed the system of river names from this region and concluded that on the basis of similarities that they shared with each other that they constituted a group descended from a common system which Krahe called "Old European". For Krahe the Old European construct constituted an intermediate layer somewhere between PIE and the emergence of the Baltic, Celtic, Germanic, Illyrian, Venetic, Italic cluster of western languages. Old European was later extended by Schmid (e.g. 1987, more recently 2001) to include the more eastern Slavic languages. Schmid argued further that the Baltic languages preserved the oldest form of IE river names, and advanced the Baltic area as the original IE homeland on that basis, with a proportionately earlier date than Krahe's Old European.

V has extended Krahe's Old European hypothesis in fundamental ways. As does Krahe, V observes that a large number of river names share such a strong structural resemblance, mostly morphological, that it is reasonable to assign them a common origin. But while Krahe proposed a different chronological layer for his Old European from ancestral PIE, he nevertheless maintained that the hydronyms are still Indo-European words, with characteristic IE fusional morphology and IE phonology. But V highlights several structural curiosities about Krahe's hydronyms which give them a decidedly non-IE look. To explain the clusterings of languages noticed by Krahe, Schmid and others, and to account for their structural patterning, V proposes the following (182–183). We quote *in extenso*:

I have shown [...] that the language of the Old European toponymy blends in with those South European languages and extends that homogeneity to the north, namely to Northern France, the Low Countries, the British Isles (excepting perhaps the

³⁵ V prefers "toponymy" to "hydronymy" to avoid confusion with Krahe's theory, discussed immediately below.

Atlantic fringe), Austria, Germany, Scandinavia (except for the northern parts), the northern Balkan, the South and West Slavic countries, and the Baltic countries. Later this vast expanse of Old European [V keeps the name; PB, BRP] was curtailed by the continuous expansion of Indo-European. Basque, in a typical fringe position at the very western edge of the once enormous territory, is the only surviving language of the stock. The Basques have sometimes been assumed to have come from distant shores, from Africa or even the Caucasus. They are, quite on the contrary, the only Europeans that have not come from anywhere: They are the original Europeans, the only surviving tribe of a once huge nation, almost driven into the Atlantic Ocean, but holding onto the mountainous land that is left to them, the only modern people preserving Old European identity in an otherwise completely Indo-Europeanized Western Europe.

How can we explain the enormous northward expansion of the Old South European language? There is a simple answer. Ten thousand years ago, when the ice, which had covered all of Northern Europe and much of Central Europe, including the larger parts of the British Isles and of Southern Germany, receded after the last ice-age, the South European peoples gradually took possession of the lands of the north, where the climate continued improving. Since they all spoke closely related languages, they named all the important natural features of their new environment in a uniform way; and they used the same names to identify their camp grounds and early settlements.

This was indeed the only time in Central European prehistory when a naming process of such scope and uniformity was possible, because this was the only time when there were rivers, lakes, swamps, hills, and other geophysical objects without names. After this event there was nothing left to be named. Populations arriving in Central Europe after the South European peoples merely took over their toponomy, adapting it to the pronunciation and word structure of their own languages-and sometimes also to the semantic structure, by popular etymology.

V supports his theory through a thorough reanalysis of Krahe's data (149–150). He reproduces Krahe's 1964:62–63 hydronymy table and selects out the following data for detailed morphological and phonological illustration.

Ava	Aura	Aula	Auma	Avantia
Ara	–	Arla	Arma	Arantia
Ala	Alara	–	Alma	Alantia
Sala	Salara	–	Salma	Salantia

What V has done is to extract from Krahe's data a consistent morphological pattern in which a relatively small number of roots is augmented by a set of recurring suffixes or suffix sequences. According to V the river names are analyzable as a root followed by a determinative, one or more derivational suffixes and consistently final *-a*. He analyzes the names he has isolated morphologically and concludes from this analysis that, contrary to Krahe's assertion about the essential IE character of the Old European hydronymy, the data point to a non-IE agglutinating language of the type reminiscent of modern Turkish. He

provides detailed argumentation to establish these points, and includes the word-structure formulae, the phonological inventory and even a tentative grammatical sketch of the Old European toponymic language, all with the aim of establishing the agglutinating, and therefore non-IE, character of the language. V also tackles (inconclusively) the special status of “aquatic *-a*”, criticizing Krahe and others for their ineffective analyses of this rare sound in the context of an IE language. As is well-known, **a* is a problematic sound in reconstructed PIE, so much so that there exist analyses of PIE in which **a* does not exist as an independent phoneme (see e.g. Lubotsky, 1989; Beekes, 1995); in these accounts *a* is treated as a secondary development from **h₂* (with *ā* from **eh₂*). But typological and comparative evidence suggests that **a* had at least some status in PIE, occurring in such roots as **g^hans-* “goose”, **kap-* “to take”, **sal-* “salt” and even *mātēr* “mother”. It also can be reconstructed for some “expressive” roots such as *k^hak^ha-* “to laugh” (cf. Lat. *cachinnō*, Gk. *καχάζω*, Skt. *kákhati*), and for interjections such as **ai* and **ā* “ah”. Despite these examples, **a* has some distributional irregularities which are noteworthy: it does not occur in endings or derivational suffixes; it shows little or no ablaut; and it is generally absent from the core vocabulary, “mother” notwithstanding. All this makes its frequency in hydronyms all the more curious, and creates the perfect setting for V’s language contact scenario.

But V’s own solution to the problem is just as inconclusive (172): “It seems to me that the *a* problem has not been solved within Krahe’s theory of the Old European hydronymy. I consider it an advantage within my own theory of the Old European toponymy that it is not affected adversely by the problem. On the contrary, within my theory the “aquatic *-a*” [...] is first of all merely an interesting property of the Old European toponymy”. It is unclear how this is an advantage (beyond the fact that *a* is common in Basque, especially in initial position). Although V later in the chapter (179–180) proposes a derivation for the final *-a* equivalent to the Basque determinative *-a*, this helps little with the predominance of *a* elsewhere in the data. And the suffix *-a* is perhaps the one *a* least in need of a non-IE etymology, since there is no shortage of nouns ending in *-a* in the various IE languages, whether deriving from **eh₂* or from some other source, including one of the “water” words, **h₂e k^w-eh₂* (cf. Lat. *aqua* < **aquā*). Much depends on the status of the *a*-vowel, and the chronology of its development in the various IE languages from the relevant areas. The problem seems to us similar to that of PIE *b*, which, though difficult to reconstruct for the parent language, is nonetheless abundant in the daughter languages.

In his review of V’s Vasconic theory Trask (1995, 1997) approaches the issues from a number of angles, some methodological, some empirical. One of Trask’s arguments against V’s theory, and the one that appears to us to be the least compelling, is that V’s position, like other substrate theories, seems to rely on the notion that there was a single substrate (in this case Vasconic) which is responsible for all the problematic, non-IE like features found in IE languages.³⁶ As he says (1995: 69): “In fact, there seems to be very little reason, a priori, to expect Basque to be a representative example of what was once a more or less monolithic

³⁶ Vennemann is not alone in arguing that the relative frequency of “a” in Old European hydronyms indicates the presence of a substrate language found throughout Central and Western Europe. Kuiper (1995) makes similar arguments without attempting to identify the substrate language. As further evidence, he cites a small set of words common to Baltic, Slavic, Celtic, Germanic and Italic with reconstructed “a”, e.g. Russ. *bob*, OPruss. *babo*, Lat. *faba* ‘bean’ (Kuiper, 1995:65).

unity stretching across Europe. [. . .] Far more probably, what the Indo-Europeans found was a patchwork of languages, large and small, some related, some not, resulting from previous millennia of settlement, displacement and language shift, just like anywhere else”. We agree that a linguistically homogenous Europe is geographically and ethnographically unlikely. Nonetheless, the similarities in the hydronyms do indicate they have a common source; the question is whether the source was Indo-European or not. One great advantage of Krahe’s analysis is that we know for a fact that Indo-Europeans inhabited the areas of Europe where the hydronyms are found. Accordingly, if the hydronyms are consistent with Indo-European morphological and phonological structures, the null hypothesis should be they are Indo-European in origin, as argued by Krahe (1954, 1964), Schmid (1987) and Kitson (1996).

Trask also criticizes V more specifically for his proposals concerning the structure of the Old European substrate language, which V discusses on 163–168. V suggests the following inventory:

i		u	p	t	k	χ
e		o	b	d	g	
	a			s		
			m	n		
	(eu)			l		
				r		
(ai)		(au)				

V compares this system with what he calls “Old Basque” (=“Proto-Basque”). As Trask points out, the system V has proposed is not particularly distinctive, nor is it much different from the inventory of many IE languages (though it is markedly different from PIE in its lack of vowel length, aspirated stops, labiovelars and so on, even more so if we consider even late PIE to have still preserved laryngeals, for which [χ] is the only parallel). Trask notes that V’s Old Basque system lacks the fortis/lenis contrast for nasals and laterals posited by Michelena (the authoritative source on the phonological history of Basque), and adheres to a segment **m* even though Michelena (e.g. 1961) had already shown that there was no evidence for this segment in Proto-Basque. He raises other technical objections as well, both of a phonological and a morphological nature. One of Trask’s most serious objections has to do with the river names themselves. First, he notes (1995:72) that “. . . none of the roots or suffixes listed by Vennemann for Old European looks anything like Basque, save for the root **iz-* “water”, posited by Azkue (1905),” which Michelena has dismissed as a phantasm. Another serious objection noted by Trask is that so many of the roots identified by V would have been impossible in Basque on phonotactic grounds, including *Drava-*, *Kara-*, *Pala-*, *Vara-* and *Visa-*, which all contain impermissible initial plosives. The IE character of the Old European hydronymy has been defended by Schmid (1987); V’s proposals have also been heavily criticized by Kitson (1996), who points to errors by V such as making erroneous segmentation, including words which are not Old European, and including words which are not river-names. Kitson’s conclusion is that Krahe’s Old European hydronymy is emphatically Indo-European.

A particularly controversial proposal by V in the Old European context is his idea (prominently chap. 5 of this volume, though the matter is discussed passim) that the name of the Bavarian city *München* derives from a word that appears in Basque as *munolmuna* “hill, slope, riverbank”. This name has long been held to have a Germanic etymology, deriving from the word for “monk” (MHG *munich* “monk” <Greco-Latin *monachus, monacus*). This seemingly straightforward etymology is complicated by the lack of clear evidence that a cloister existed at the site prior to the city’s founding in 1158 by Heinrich the Lion (Berger, 1993, s.v.). Trask objects that V’s etymology would have to rest on a Vasconic form **bunno* if it is ancient, which would fail to yield the correct phonological outcome for *München*. According to Trask Basque words beginning with *m* are typically borrowings from Romance, and so it is with *munolmuna*. This etymology, then, like so many aspects of V’s theory, has an initial general appeal, but fails to stand up to specialist scrutiny.

4. The book itself

In *Europa Vasconica-Europa Semitica*, V aims to present and defend his proposals concerning the role of Semitic and Vasconic languages in the linguistic development of prehistoric Europe. V’s readers will appreciate the convenience of a one-volume collection of his articles, all of which are all carefully written and well-edited. The English summaries preceding each chapter are extremely useful as are the indexes for subjects, place names and what V terms Atlantic and Old European appellatives. The preface and the introduction do an excellent job of outlining V’s theory and provide context for the articles that follow. Unfortunately, the collective bibliography and lack of an index of names make it rather difficult to track down V’s reactions to other scholarly work in the field. Despite this technical shortcoming, *Europa Vasconica-Europa Semitica* is an indispensable resource for anyone interested in seriously examining V’s theory or many of the specific secondary topics which fall under V’s theory, such as the Indo-Europeanization of Europe, or the role of contact in the formation of PIE.

After reading this collection, one is struck by the many facets of V’s theory and by V’s willingness to take on conventional wisdom about the linguistic prehistory of northern and western Europe. Given the vastness of V’s undertaking, and the challenge that this book presents to the reader, one wishes that V had written a separate monograph and presented a unified account of prehistoric language contact between the Indo-Europeans and Vasconic and Semitic speakers. The most obvious weakness of the format V has chosen is the amount of repetition. For example, the origin of the Bavarian place name *München* is discussed at length in chapters 3 and 5. Similarly, discussions of language contact theory, the Germanic lexicon, Germanic mythology, Old European toponymy and other topics are at times repetitive. V is well aware of the problem. As he states in the preface (viii):

Since the articles, most of them originally conference papers or guest lectures, had each been composed so as to be complete in themselves, while at the same time reflecting the progress reached in developing the theory, the book as a whole unfortunately contains many repetitions. This will be inconspicuous to readers of the individual papers but

may at times be irritating to those reading the book continuously. I regret this and apologize.

V justifies his choice of format by pointing out that his theory is still developing and that a few of the articles may be difficult to find in some parts of the world. For example, chapter 17, which provides a lengthy overview of V's theory, was written in 1996 and never before published. However, all remaining articles should be accessible to anyone who has interlibrary loan privileges. Given the high price tag and specialized topic of *Europa Vasconica-Europa Semitica*, its distribution will be limited primarily to large research libraries. We therefore do not believe that the laudable goal of greater accessibility justifies the choice of format in this case. And in any event, the proposal of a radical new theory of Indo-European prehistory certainly deserves an independent, coherent treatment written in a single language, as for example Renfrew did with his *Archaeology and Language* in 1987, crystallizing much earlier research.

Research by V since 2000 has focused on contact-related changes involving Atlantic. For Germanic, V has recently proposed Semitic etymologies for Proto-Germanic etyma relating to social structure and religion and for strong verbs: PGmc. *apal-* “nobility” (Ger. *Adel*), PGmc. *sibjō* “family” (E. *sib*, Ger. *Sippe*), PGmc. *drepan* “to hit” (Ger. *treffen*). V lays particular importance on the occurrence of *Phol* and *Balder* in the Second Merseburg Charm, a piece of alliterative Old High German verse copied in a tenth century manuscript in which the names *Phol* and *Balder* appear to refer to the same Germanic god. V interprets *Phol* as a reflex of an early borrowing of the Phoenician theonym *Ba^cal* “Baal”, which has undergone Grimm's Law. V sees OHG *Balder* as a borrowing from Punic *Baldir* (< *Ba^cal* 'Addir “Great Baal”), which was borrowed after the operation of Grimm's Law. These borrowings are then used to date Grimm's Law to between the fifth and third centuries BCE, the period ending with the Second Punic War between Carthage and Rome (xvii, Vennemann, 2004). For Celtic, V's recent work traces the origin of some Celtic structural features to Atlantic, in particular VSO word order (e.g., Vennemann, 2003a, 2003b).

The new developments referred to by V all relate to new evidence that V sees as reinforcing parts of his theory, which we recapitulate here in brief. After the last ice-age, Vasconic speakers spread across Europe, naming places, flora and fauna as they went. The Vasconic speakers served as a substrate to the subsequent Indo-European population in western and northern Europe. The Indo-Europeans adopted the Vasconic place names as well as Vasconic lexical items referring to the natural environment. V views the Old European hydronyms identified by Krahe (e.g. 1964) as Vasconic. Atlantic (Semitic) speakers were found in the coastal regions of northern Europe and the British Isles. These Atlantic speakers were culturally superior to the Proto-Germanic speakers who encountered them in southern Scandinavia and northern Europe. Consequently, the Proto-Germanic speakers borrowed a wide-range of “cultural” vocabulary referring to technology, cosmology, and social structure. In the British Isles, the Atlantic speakers formed a substrate to the Celtic population, and their language had a profound structural effect on Celtic. Many of these structural features were subsequently absorbed into English under the influence of a Celtic substrate, a process V refers to as “the transitivity of language contact” (ix).

Obviously, some of the criticisms mentioned in this review do not necessarily undermine the larger picture presented by V. For example, a non-Vasconic origin for the

name for Bavaria's capital city, *München*, is perfectly compatible with the prior existence of a Vasconic substrate. By way of a local parallel, Pennsylvania's capital city, *Harrisburg*, does not derive its name from a Native American substrate language, but no one questions the prior presence of the Iroquois-speaking Susquehannock people along the Susquehanna River, which flows by Harrisburg.³⁷ Given the time depth of V's theory, however, the story of what happened in European prehistory is much murkier. It is always difficult to prove a negative, and it is impossible to do so for human events in the eighth millennium BCE. In other words, V's critics will probably never be able to prove that Vasconic speakers were not present in much of Europe after the last ice-age or that Atlantic speakers did not establish themselves in coastal areas of Europe beginning in the fifth millennium.

What V and other scholars must do is evaluate the available evidence. In our view, a monograph would have given V an opportunity to present his strongest arguments in a unified account of the linguistic prehistory of Europe. A monograph would have allowed V to discard weak evidence, eliminate redundancies, respond to several decades of debate and critique, and highlight essential elements of his case. Instead, V offers the reader of this volume a wide array of evidence in a gradual, often repetitive fashion. In choosing this format, V opens his theory up to misinterpretation and dismissal by those who find a particular piece of his argument to be objectionable.

We hope in this review to have made it clear that, while we disagree with part of what V has proposed, we also applaud his efforts to reassess the role and extent of language contact in the development of Indo-European languages in Europe. We remain eager to learn more about this fascinating approach to the prehistory of European language and culture.

Acknowledgements

We are grateful to Joseph Eska, Garrett Fagan, Paul Newman, Aaron Rubin, Gonzalo Rubio, Pierluigi Cuzzolin, Rob Howell, Joseph Salmons, Brian Joseph and two anonymous *Lingua* reviewers for their helpful comments, suggestions and corrections. It goes without saying that they are in no way responsible for any errors of fact or interpretation which may remain.

References

- Anttila, R., 1989. *Historical and Comparative Linguistics, Current Issues in Linguistic Theory*, second ed., vol. 6. Benjamins, Amsterdam.
- de Azkue, R.M., 1905. *Diccionario vasco-español-francés*. Bilbao. Reprinted in 1969 with a supplement, *Le Gran Enciclopedia Vasca*, Bilbao. Reprinted in 1984 with an introduction by Luis Michelena.
- Beekes, R.S.P., 1995. *Comparative Indo-European Linguistics: An Introduction*. Benjamins, Amsterdam.
- Beekes, R.S.P., 1997. Ancient European loanwords. *Historische Sprachforschung* 109, 215–236.
- Berger, D., 1993. *Geographische Namen in Deutschland: Herkunft und Bedeutung der Namen von Ländern, Städten*. In: *Bergen und Gewässern*, Dudenverlag, Mannheim.

³⁷ In this case, the hydronym is misleading. *Susquehanna* and *Susquehannock* are actually Algonquian in origin. The Iroquois names the Susquehannocks used for themselves and for the Susquehanna River are unknown. (*OED*, s.v.).

- Bergsträsser, G., 1983. Introduction to the Semitic languages. Eisenbrauns, Winona Lake. (Translation of 1928 original Einführung in die semitischen Sprachen, with additional notes and commentary, by Peter T. Daniels).
- Black, J., George, A., Postgate, N., 2000. A Concise Dictionary of Akkadian. Harrassowitz, Wiesbaden, 2nd corrected printing.
- Bomhard, A.R., Kerns, J.C., 1994. The Nostratic Macrofamily: A Study in Distant Genetic Relationship. Trends in Linguistics: Studies and Monographs 74. Mouton de Gruyter, Berlin.
- Boutkan, D., Kossmann, M.G., 1999. Some Berber parallels of European substratum words. *Journal of Indo-European Studies* 27, 87–100.
- Brunner, L., 1969. Die gemeinsamen Wurzeln des semitischen und indogermanischen Wortschatzes: Versuch einer Etymologie. Francke, Bern.
- Campbell, L., 1988. Review of Greenberg (1987). *Language* 64, 591–615.
- Coates, R.A., 1988. Periplus: a voyage round the Solent. In: Coates, R.A. (Ed.), *Toponymic Topics: Essays on the Early Toponymy of the British Isles*. Younsmere Press, Brighton, pp. 1–20.
- Diakonoff, I.M., Kogan, L., 1996. Addenda et corrigenda to the Hamito-Semitic etymological dictionary (HSED) by V. Orel and O. Stolbova. *Zeitschrift der deutschen morgenländischen Gesellschaft* 146, 25–38.
- Dixon, R.M.W., 1997. *The Rise and Fall of Languages*. Cambridge University Press, Cambridge.
- Doerfer, G., 1973. Lautgesetz und Zufall: Betrachtungen zum Omnicomparatismus. *Innsbrucker Beiträge zur Sprachwissenschaft* 10. Inst. f. Vergleichende Sprachwissenschaft d. Univ. Innsbruck, Innsbruck.
- Edzard, L., 1998. Polygenesis, Convergence, and Entropy: An Alternative Model of Linguistic Evolution Applied to Semitic Linguistics. Harrassowitz, Wiesbaden.
- Eska, J.F., 1994. Rethinking the evolution of Celtic constituent configuration. *Münchener Studien zur Sprachwissenschaft* 55, 7–39.
- Gamkrelidze, T.V., Ivanov, V.V., 1995. Indo-European and the Indo-Europeans (Part 1, The text; part 2, Bibliography, indices). Trends in Linguistics: Studies and Monographs 80. Mouton de Gruyter, Berlin and New York. [English version by Johanna Nichols of *Indoevropskij jazyk i indoevropejcy*. 1984. Tbilisi University Press, Tbilisi.].
- Gensler, O.D., 1993. A Typological Evaluation of Celtic/Hamito-Semitic Syntactic Parallels. Unpublished Ph.D. dissertation, University of California, Berkeley.
- Gimbutas, M., 1973. Old Europe c. 7000-3500 BC: the earliest European civilisation before the infiltration of the Indo-European peoples. *Journal of Indo-European Studies* 1, 1–21.
- Greenberg, J.H., 1987. *Language in the Americas*. Stanford University Press, Stanford.
- Halle, M., 1997. On stress and accent in Indo-European. *Language* 73, 275–313.
- Hamp, E.P., 1990. The pre-Indo-European language of Northern (Central) Europe. In: Markey, T.L., Greppin, J.A. (Eds.), *Linguistica Extranea, Studia*. vol. 19: *When Worlds Collide: The Indo-Europeans and Pre-Indo-Europeans*. Karoma, Ann Arbor, pp. 291–301.
- Harvey, P.B., Baldi, P., 2002. Latin *populus*: a reevaluation. In: Jones-Bley, K., et al. (Eds.), *JIES Monograph Series*, vol. 44: *Proceedings of the 13th Annual UCLA Indo-European Conference*. Institute for the Study of Man, Washington, pp. 145–164.
- Hetzron, R., 1987a. Afroasiatic languages. In: Comrie, B. (Ed.), *The World's Major Languages*. Croom Helm, London, pp. 645–653.
- Hetzron, R., 1987b. Semitic languages. In: Comrie, B. (Ed.), *The World's Major Languages*. Croom Helm, London, pp. 654–663.
- Huld, M.E., 1990. The linguistic typology of the Old European substrata in North Central Europe. *Journal of Indo-European Studies* 18, 389–423.
- Isaac, Graham R., 2001. The function and typology of absolute and conjunct flexion in early Celtic: some hints from Ancient Egyptian. *Transactions of the Philological Society* 99, 147–170.
- Jackson, K.H., 1955. The Pictish language. In: Wainright, F.T. (Ed.), *The Problem of the Picts*. Nelson, London, pp. 129–160.
- Jongeling, K., 1995. Afro-Asiatic and Insular Celtic. *Dutch Studies* 2, 135–165.
- Kitson, P.R., 1996. British and European river names. *Transactions of the Philological Society* 94, 73–118.
- Kluge, F., 1995. *Etymologisches Wörterbuch der deutschen Sprache*, 23rd ed. De Gruyter, Berlin, revised by Elmar Seebold.

- Kogan, L., 2002. Addenda et corrigenda to the Hamito-Semitic etymological dictionary (HSED) by V. Orel and O. Stolbova (II). *Journal of Semitic Studies* 47, 183–202.
- Krahe, H., 1954. *Sprache und Vorzeit: Europäische Vorgeschichte nach dem Zeugnis der Sprache*. Quelle und Meyer, Heidelberg.
- Krahe, H., 1964. *Unsere ältesten Flussnamen*. Harrassowitz, Wiesbaden.
- Krahe, H., Meid, W., 1967–1969. *Germanische Sprachwissenschaft*, seventh ed., 3 vols. vol. 1: Einleitung und Lautlehre; vol. 2: Formenlehre; vol. 3: Wortbildungslehre. De Gruyter, Berlin.
- Kuiper, F.B.J., 1995. Gothic *bagms* and Old Icelandic *ylgr*. *NOWELE* 25, 63–68.
- Lehmann, W.P., 1993. *Theoretical Bases of Indo-European Linguistics*. Routledge, London.
- Lubotsky, A., 1989. Against a Proto-Indo-European phoneme **a*. In: Vennemann, T. (Ed.), *The New Sound of Indo-European*. Mouton de Gruyter, Berlin, pp. 53–66.
- Mallory, J.P., 1989. *In Search of the Indo-Europeans: Language, Archaeology and Myth*. Thames and Hudson, London.
- Mallory, J.P., Adams, D.Q., 1997. *Encyclopedia of Indo-European Culture*. Fitzroy Dearborn, London.
- Matosovic, R., 1995. A re-examination of Winter's Law in Baltic and Slavic. *Lingua Posnaniensis* 37, 57–70.
- Michelena, L., 1961. *Fonética histórica vasca*. Donostia-San Sebastián: Disputación de Guipúzcoa. [2nd expanded ed., 1977; 3rd ed., 1985.] Publicaciones del Seminario de Filología Vasca 'Julio de Urquijo', San Sebastián.
- Milroy, J., 1992. *Linguistic Variation and Change: On the Historical Sociolinguistics of English*. Blackwell, Oxford.
- Möller, H., 1906. *Semitisch und Indogermanisch*. Hagerup, Kopenhagen.
- Möller, H., 1911. *Vergleichendes indogermanisches-semitisches Wörterbuch*. Vandenhoeck & Ruprecht, Göttingen, [1970 reprint].
- Morris Jones, J., 1900. Pre-Aryan syntax in Insular Celtic. In: Rhys, J., Brynmor-Jones, D. (Eds.), *The Welsh People: Chapters on Their Origin, History, Laws, Language, Literature and Characteristics*. T. Fisher Unwin, London, appendix B, pp. 617–641.
- Orel, V., Stolbova, O.V., 1995. *Hamito-Semitic Etymological Dictionary: Materials for a Reconstruction*. *Handbuch der Orientalistik*, vol. 18. Brill, Leiden.
- The Oxford English Dictionary, 1989. Simpson, J., Weiner, E. (Eds.), second ed. Oxford University Press, Oxford.
- The Oxford Latin Dictionary, 1982. Glare, P.G.W. (Ed.). Oxford University Press, Oxford.
- Pokorny, J., 1927–1930. Das nicht-indogermanische Substrat im Irischen. *Zeitschrift für celtische Philologie* 16, 95–144, 231–266, 363–394 (1927); 17, 373–388, (1928); 18, 233–248 (1930).
- Pokorny, J., 1949. Zum nicht-indogermanischen Substrat im Inselkeltischen. *Die Sprache* 1, 235–245.
- Pokorny, J., 1951/1959. *Indogermanisches etymologisches Wörterbuch*. Francke, Bern.
- Polomé, E.C., 1986. The non-Indo-European component of the Germanic lexicon. In: Etter, A. (Ed.), *o-o-pe-rosi: Festschrift für Ernst Risch zum 75. Geburtstag*. De Gruyter, Berlin, pp. 661–672.
- Renfrew, C., 1987. *Archaeology and Language: The Puzzle of Indo-European Origins*. Jonathan Cape, London.
- Renfrew, C., 1999. Time depth, convergence theory, and innovation in Proto-Indo-European: Old Europe as a PIE linguistic area. *Journal of Indo-European Studies* 27, 257–293.
- Rix, H., 2001. *Lexicon der indogermanischen Verben (LIV)*. Wiesbaden: Reichert.
- Rösener, W., 1992 [1985]. *Peasants in the Middle Ages*. Trans. by Alexander Stützer. Polity, Cambridge, UK. [Originally published as *Bauern im Mittelalter*. Beck, München].
- Rubio, G., 1999. On the alleged pre-Sumerian substratum. *Journal of Cuneiform Studies* 51, 1–16.
- Rubio, G., 2003. Falling trees and forking tongues: the place of Akkadian and Eblaite within Semitic. In: Kogan, L. (Ed.), *Studia Semitica (Festschrift for A. Militarev)*. Russian State University for the Humanities, Moscow, pp. 152–189.
- Rubio, G., forthcoming. The linguistic landscape of early Mesopotamia. In: van Soldt, W.H. (Ed.), *Compte Rendu de la 48e Rencontre Assyriologique Internationale*. Publications de l'Institut historique-archéologique néerlandais de Stamboul, Leiden.
- Salmons, J., 1992. *Accentual Change and Language Contact: Comparative Survey and a Case Study of Early Northern Europe*. Stanford University Press, Stanford.

- Salmons, J., 2004. How (non-) Indo-European is the Germanic lexicon? ... And what does that mean? In: Hyvärinen, I., Kallio, P., Korhonen, J. (Eds.), *Etymologie und Entlehnungen: Festschrift für Jorma Koivulehto zum 70. Geburtstag*. Peter Lang, Frankfurt, pp. 311–321.
- Schmid, W.P., 1987. 'Indo-European'-'Old European' (on the reexamination of two old linguistic terms). In: Skomal, S.N., Polomé, E.C. (Eds.), *Proto-Indo-European: The Archaeology of a Linguistic Problem*. Studies in honor of Marija Gimbutas. Institute for the Study of Man, Washington, pp. 322–338.
- Schmid, W.P., 2001. Was Gewässernamen in Europa besagen. *Akademie-Journal* 2, 42–45.
- Sheynin, H.Y., 2004. Review of Vennemann, T., 2003. *Europa Vasconica-Europa Semitica*. LINGUIST List: Vol-15-1878 (June 21, 2004). ISSN 1068-4875.
- Shisha-Halevi, A., 2000. Stability in clausal/phrasal pattern constituent sequencing: 4000 years of Egyptian. In: Sornicola, R., Poppe, E., Shisha-Halevi, A. (Eds.), *Stability, Variation, and Changes of Word-Order Patterns over Time*. Benjamins, Amsterdam, pp. 71–100.
- Stumfohl, H., 1989. Die wissenschaftliche Position Dominik Wölfels im Jahre 1988. *Almogaren* 17–19, 113–155.
- Szemerényi, O., 1985. Recent developments in Indo-European linguistics. *Transactions of the Philological Society* 1–71.
- Thomason, S.G., 2001. *Language Contact*. Georgetown University Press, Washington.
- Thomason, S.G., Kaufman, T., 1988. *Language Contact, Creolization and Genetic Linguistics*. University of California Press, Berkeley.
- Tilley, C., 1996. *An Ethnography of the Neolithic: Early Prehistoric Societies in Southern Scandinavia*. Cambridge University Press, Cambridge.
- Trask, R.L., 1995. Origin and relatives of the Basque language: review of the evidence. In: Hualde, J.I., et al. (Eds.), *Towards a History of the Basque Language*. Benjamins, Amsterdam, pp. 65–77.
- Trask, R.L., 1997. *The History of Basque*. Routledge, London and New York.
- Trubetzkoy, N.S., 1939. Gedanken über das Indogermanenproblem. *Acta Linguistica* 1, 81–89. [Reprinted in: Scherer, A. (Ed.), *Die Urheimat der Indogermanen*. Wissenschaftliche Buchgesellschaft, Darmstadt (1968) 212–223].
- Van Coetsem, F., 1988. Loan Phonology and the Two Transfer Types in Language Contact. *Publications in Language Sciences*, vol. 27. Foris Publications, Dordrecht.
- Van Coetsem, F., 2000. A General and Unified Theory of the Transmission Process in Language Contact. *Monographien zur Sprachwissenschaft*, vol. 19. Winter, Heidelberg.
- Vasmer, M., 1953–1958. *Russisches etymologisches Wörterbuch*. Winter, Heidelberg.
- Vennemann, T., 1974. Topics, subjects, and word order: from SXV to SVX via TVX. In: Anderson, J.M., Jones, C. (Eds.), *Historical Linguistics*, 2 vols. Proceedings of the First International Conference on Historical Linguistics. North Holland, Amsterdam, vol. 2, pp. 339–376.
- Vennemann, T., 1975. An explanation of drift. In: Li, C.N. (Ed.), *Word Order and Word Order Change*. University of Texas Press, Austin, pp. 269–305.
- Vennemann, T., 1994. Linguistic reconstruction in the context of European prehistory. *Transactions of the Philological Society* 92, 215–284.
- Vennemann, T., 2002a. Semitic→Celtic→English: the transitivity of language contact. In: Filpula, M., et al. (Eds.), *The Celtic Roots of English*. Studies in Languages, vol. 37. University of Joensuu, Faculty of Humanities, Joensuu, pp. 295–330.
- Vennemann, T., 2002b. On the rise of 'Celtic' syntax in Middle English. In: Lucas, P.J., Lucas, A.M. (Eds.), *Middle English from Tongue to Text: Selected Papers from the Third International Congress on Middle English: Language and Text*. Studies in Medieval Language and Literature, vol. 4. Peter Lang, Bern, pp. 203–234.
- Vennemann, T., 2003a. Languages in prehistoric Europe north of the Alps. In: Bammesberger, A., Vennemann, T. (Eds.), *Languages in Prehistoric Europe*. Indogermanische Bibliothek. Carl Winter, Heidelberg, pp. 319–332.
- Vennemann, T., 2003b. Syntax und Sprachkontakt: Mit besonderer Berücksichtigung der indogermanischen Sprachen des Nordwestens. In: Bammesberger, A., Vennemann, T. (Eds.), *Languages in Prehistoric Europe*. Indogermanische Bibliothek. Carl Winter, Heidelberg, pp. 333–364.
- Vennemann, T., 2004. *Phol, Balder*, and the birth of Germanic. In: Hyvärinen, I., Kallio, P., Korhonen, J. (Eds.), *Etymologie, Entlehnungen und Entwicklungen: Festschrift für Jorma Koivulehto zum 70. Geburtstag*. Société Néophilologique, Helsinki, pp. 439–457.

- Vennemann, T., forthcoming. Glauben wir noch an die Lautgesetze? Zur Etymologie von *Phol* und *Balder* im zweitem Merseburger Zauberspruch. In: Meiser, G. (Ed.), Akten der XI. Fachtagung der Indogermanischen Gesellschaft: Sprachkontakt und Sprachwandel. Halle/Saale, pp. 17–23.
- Verner, K., 1877. Eine ausnahme der ersten lautverschiebung. (*Kuhns*) Zeitschrift für vergleichende Sprachforschung auf dem Gebiete der indogermanischen Sprachen 23, 97–130.
- Villar, F., 1991. Los indoeuropeos y los orígenes de Europa: Lenguaje e historia. Gredos, Madrid.
- Von Soden, W.B., 1965. Akkadisches Handwörterbuch, 3 vols. Harrassowitz, Wiesbaden.
- Wagner, M., 1966. Die lexikalischen und grammatikalischen Aramaismen im alttestamentlichen Hebräisch. Töpelmann, Berlin.
- Wainright, F.T., 1955. The Picts and the problem. In: Wainright, F.T. (Ed.), The Problem of the Picts. Nelson, London, pp. 1–53.
- Watson, W.J., 1926. The History of the Celtic Place-names of Scotland. Blackwood and Sons, Edinburgh.
- Winter, W., 1978. The distribution of short and long vowels in stems of the type Lith. *é* vowels of the type Lith. *ésti*: *vèsti*: *mèsti* and OCS *jasti*: *vesti*: *mesti* in Baltic and Slavic languages. In: Fisiak, J. (Ed.), Recent Developments in Historical Phonology. Mouton, The Hague, pp. 431–446.
- Woodhouse, R., 1995. Some criticisms of the Gamkrelidze/Ivanov glottalic hypothesis for Proto-Indo-European. *Historische Sprachforschung* 108, 173–189.
- Yadin, Y., 1963. The Art of Warfare in Biblical Lands in the Light of Archaeological Discovery. International Publishing Company, London, trans. by M. Pearlman.
- Zimmer, H., 1898. Matriarchy among the Picts. In: Henderson, G., Zimmer, H. (Eds.), *Leabhar nan Gleann*. Norman Macleod, Edinburgh, pp. 1–42.