

**Valter Lang**

## ARCHAEOLOGY AND LANGUAGE

### *Abstract*

The article focuses on the language of archaeology: what language do we, as archaeologists, use, and why? The contribution is based on a discussion that ran in the Estonian press and periodicals in 1998 and 1999. The opinions in this discussion were divided into two camps, claiming respectively (1) that there exists only one science which would only benefit if all researchers published in English (the representatives of the exact and natural sciences), and (2) that science is not uniform and for the study of at least nation-centred fields the native language should be propagated (the representatives of humanities). The author advocates the latter standpoint.

*Keywords:* archaeology, language, science, humanities, policy of science, national culture, refereed and indexed periodicals.

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This article does not deal with - as might be inferred from the title (especially when referring to Colin Renfrew) - the comparison of archaeological and linguistic materials, *i.e.* something classified under ethnic archaeology. Instead, it focuses on the language of archaeology itself: what language do we, archaeologists, use, and why? Such a question may seem superfluous, or even ridiculous, for a member of any great nation - an Englishman finds it most natural to write in English, a Russian in Russian, a Frenchman in French *etc.*; all of them take it for granted that every reader can comprehend their language. The problem is much more tragic and existential for a member of a small nation. His inbred mentality tells him that no-one tends to understand his small and weird mother tongue, and, to make himself understood, he needs to use the language of his interlocutor. If an archaeologist of a small nation wants to get his message through to the colleagues in other countries, he will have to publish his text in one of the great languages. But, in that case, what about his own people: how should his countrymen get hold of the most recent data about themselves and their country? What consequences will such policy

bring to his own national culture, of which scientific study, archaeology included, is an organic and integral part? What is going to happen to his language, scientific language in particular, which becomes stunted as soon as it is no longer used? Members of great nations do not face similar problems - both their colleagues abroad and their own people share a common medium.

Neither does this article deal with so-called scientific colonialism in archaeology, *i.e.* pressure of larger archaeologies, particularly Anglo-American, on smaller ones. Bjørnar J. Olsen (1991) has already written an exhaustive article on that topic and it is difficult to add anything to this. Rather it touches a phenomenon, which might be called a national inferiority complex in science B the internal readiness of scientific community of a small nation for complete transition to the language of a great nation, *i.e.* English in this case. Without doubt, the inferiority complex of this kind is connected with, and caused by, scientific colonialism.

In Estonia, which only ten years ago was still firmly attached to the Soviet Empire where Russian was accepted as the sole language of administration and science, the acuteness of the issue

was publicly acknowledged in autumn 1998. It was Peeter Tulviste, Vice President of the Estonian Academy of Sciences and former rector of the Tartu University, who drew public attention to the problem. In his opinion, a small nation like Estonia needs to adopt English for the scientific use as soon as possible, in order to become noticed in the global science. His arguments are as follows:

(1) the world is moving towards the common language of science (English) and we cannot afford to be left behind;

(2) it is possible to produce incompetent and inefficient science in small and "incomprehensible" languages for decades, and, worse still, to pass this sort of science for genuine at universities;

(3) a common language of science would encourage communication and co-operation of the scientists across the linguistic, state and other boundaries;

(4) a common language of science would encourage competition between the scientists regardless of where they work.

Tulviste reaches the conclusion that for the sake of successful, competitive science and a similar system of education it is necessary not only to increase the share of English in the university curricula but to introduce all-English programmes in a number of fields of study. Apart from these measures, Tulviste finds it absolutely imperative for the scientists to publish their results in English; and to promote contacts with the British, American and Australian universities. To prevent the national culture from becoming seriously inadequate, on the other hand, the scientists should write quality textbooks and popularising treatises in Estonian (Tulviste 1999).

Tulviste's standpoint prompted a spirited discussion in the Estonian press in winter 1998-99 and the following spring that divided the opinions into two. (1) The representatives of the exact and natural sciences supported Tulviste, claiming that there existed only one science which would only benefit if all researchers were publishing in English (Aben 1999; Rahu 1999). It was further maintained that the vitality of any given science is proven by the number of publications in international referred and indexed (RI) periodicals. (2) The representatives of humanities, on the other hand, ar-

gued that there existed more sciences than one and for the study of at least the nation-centred sciences<sup>1</sup> the native language should be propagated (Lang 1998; 1999; Talvet 1999; Jansen & Palli 1999). In their opinion, the publishing in RI-periodicals is not important, as the ways of spreading and circulating scientific data differ substantially between the humanities and hard sciences.

Philologist Uno Liivaku (1999) went a step further in stating the opposing views: "There are two main arguments: (1) only English qualifies for the language of science and (2) Estonian (and thus any other) language qualifies for the language of science as well." Liivaku approached the question strictly from the standpoint of the Estonian language.

My own experience and the communication with the colleagues abroad have made me aware of the fact that similar issues are being discussed within the policy of science of several other countries. I should like to discern two related sets of questions that need to be resolved; the answers to the questions shall inevitably shape the future of both the national cultures and humanities. The first set deals with the language of science (national language versus "lingua franca"), the other with the relations between the "soft" national sciences and "real science". I hope that the conclusions drawn from the discussion of these subjects in Estonia and the arguments clarified during it could be of interest for the international audience.

#### IS THERE BUT ONE SCIENCE?

To start with, the most general and, at the same time, the most important question needs to be asked: is there only one unitary science, or are there several sciences? It can be answered in one way or another. Science could be treated as unitary if a sufficiently broad common denominator to embrace every scientific discipline can be found. The denominator has to include a determiner that distinguishes science from non-science irrespective of the discipline. Following the same logic it can be claimed that there exists only one culture in the world - provided that a common denominator can be found which discriminates culture from non-culture irrespective of the local context. Not dissimilarly to cultures, where the representatives of one culture may consider it culturally acceptable to eat up the representative of another, the

methods employed within one discipline could cause bewildered anxiety within another. Let us take, for instance, archaeology. Although it has been claimed recently that the methodology of the postprocessual archaeology does not essentially differ from that of the hard sciences (VanPool & VanPool 1999), one should keep in mind the most substantial difference between archaeology and science - the difference lying in the nature of observation, the main method of acquiring scientific knowledge. While in science the objectivity of the observation and experiment is the chief consideration (in a sense that it should be possible for the others to repeat them in identical circumstances), in the event of archaeology the fundamental observation - archaeological excavation - cannot be repeatable, and thus objective, because of its very nature.

What the claim "there is only one science" means, is that the method and object of study of the science are universal, the same everywhere. The fundamental laws, principles and theories of the exact sciences have universal applicability, and the scientists working in one part of the globe need to know the inventions and discoveries made in any other part. It follows logically that the language of this type of science, the language of the publications of its results in particular, could indeed be universal. Both the discipline itself and scientists would benefit from it. On the losing side will be the national cultures in their mother tongue which include science as an integral part.

In the case of "soft" national sciences, the line of reasoning is quite different. Although Peeter Tulviste wrote that the use of different languages in science "... disintegrates the international quest for scientific truth along the national and linguistic boundaries...", it is impossible to imagine the national sciences to be pursued in any other way. Thus the number of different archaeologies can even exceed the number of peoples studying their prehistory. The archaeologies usually differ in their objects of study, which vary from nation to nation. Another source of differences is the profusion of simultaneous competing paradigms in archaeology that can at times make it difficult for even the researchers of one country to understand each other. The main reason, however, is the local nature of the object of study. An archaeologist educated in Estonia would find his knowledge quite useless for instance in Mexico, and *vice ver-*

*sa*. Potential Mexican Estophiles and the researchers of the Native American cultures in Estonia excluded, the Estonian and Mexican archaeologists lack any urgent need to understand each other in the context of their everyday work. The situation is somewhat different in the case of Estonian and Latvian archaeology - due to the geographical neighbourhood, the similarities in the objects of study abound, and the mutual understanding of the researchers often becomes quite important. Should the Estonian and Latvian archaeologists publish their texts in English because of this? The answer could be "yes" if one only considers the professional interests of a small number of archaeologists. If all the subject-related literature were published in English, the command of just one foreign language would suffice. The actual situation, at least in our region, is unfortunately rather different, because the majority of subject-related literature is not published in English; the need to study several foreign languages is thus inevitable anyway.

#### THE LINGUISTIC ENVIRONMENT OF OUR ARCHAEOLOGIES

To illustrate the above assertion (Fig. 1), I divided the references from the works of Estonian archaeologists published in the 1990s (over 5000 references altogether) by the languages used - this is the best indicator of the linguistic environment a researcher is working in. Moreover, as the majority of the references are to the texts published in Estonia, the language of the references also indicates the languages in which the researchers choose to publish. References in Estonian and German predominate, at 24.1 and 24.0 per cent respectively, followed at a small distance by the publications in Russian and English (21.7 and 16.9 per cent). Further down come the publications in Swedish (4.8 per cent), Latvian and Finnish (both at 2.7 per cent), and various other languages (Lithuanian, Polish, Norwegian, Danish, French, *etc.*; 3.1 per cent altogether). It can be concluded that (1) the number of languages the Estonian archaeologists use in their everyday work is considerable (four priority languages and three or four less significant ones), and (2) the share of English publications in the reference material is currently a meagre 17 per cent. The linguistic plurality of the Estonian archaeology is contingent to our politi-

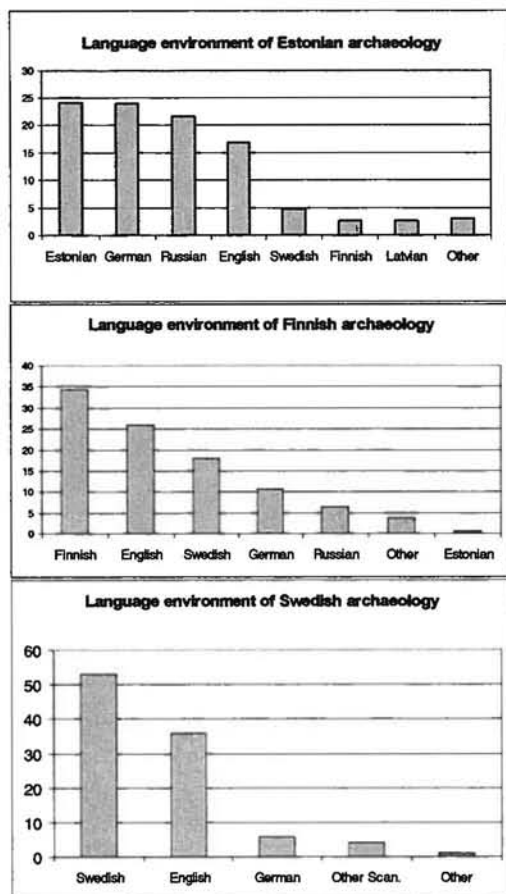


Fig. 1.

cal past (the alternate incorporation of Estonia into German and Russian-based political systems); it follows that a decision to prefer any one language as the language of science (national science in particular) is political by its nature.

This analysis urged me to investigate the same distribution in other archaeologies. I analysed the references found in Finnish, Swedish, British and German archaeological literature published in the 1990s, and categorised the references linguistically. In every case I confined the selection to ca 4000-5000 references, as from ca 3000 references upwards the proportions of separate languages remained relatively unaltered. I focused on various periodicals as well as monographs, and avoided interdisciplinary treatises and multilingual publications. The results, quite predictable without reading, are interesting and thought-provoking.<sup>2</sup>

In Finland references to the publications in Finnish (34.3 per cent) are well ahead of those in English and Swedish (26 and 18.1 per cent respectively). However, keeping in mind that a number of Finnish archaeologists are native Swedes and Swedish is the second national language in Finland, it could be claimed that the proportion of national languages in Finnish archaeology amounts to 52.4 per cent. By the 1990s, the share of German (10.7 per cent) has markedly diminished; it is followed by Russian (6.5 per cent; almost two thirds of Russian references come from a single title that treats Karelian prehistory). There are four times less references to Estonian treatises in Finnish archaeological publications (0.6 per cent) than *vice versa*. Other languages (the rest of Scandinavian languages, Baltic languages, *etc.*) comprise 3.8 per cent of all the references.<sup>3</sup>

In Sweden the references to Swedish publications dominate (53 per cent), followed by English titles (35.9 per cent). Similarly to Finland, the share of German is small - only 5.7 per cent - as is, surprisingly enough, that of other Scandinavian languages (4.2 per cent). References to the publications in the rest of the languages hardly occur, comprising 1.2 per cent (of 4930 references only 3 referred to Russian, 6 to Estonian and 8 to Latvian or Lithuanian publications).

Proceeding to the archaeologies of great nations, the British and German (Fig. 2), it is not surprising that the lion's share of references point at the publications in native language. In Germany, the proportion of references to German publications is 80.6 per cent; publications in English have quite a modest share (7.2 per cent), followed by still less frequent references to French titles (2.7 per cent). The relatively great share of Polish publications evident in the Figure (3.5 per cent) is largely due to one specific monograph; in addition, references to Danish, Swedish, Dutch, Italian, Spanish, Czech, *etc.* publications occurred. In the UK published literature, the references to English publications absolutely dominate (94.3 per cent). The remaining 5.7 per cent of total references was shared mainly between French and German texts. No doubt that predominantly native language environment is similarly characteristic of Russian, French, Spanish, Italian, *etc.* archaeology.

The study of references revealed several consistent and significant tendencies. (1) The greater

the nation, the higher the proportion of native language publications and the smaller the number of languages used (and *vice versa*). The Baltic and Nordic countries are surrounded by large and predominantly monolingual archaeologies - "archaeological empires" (British, German, Russian) which makes it even more evident that the choice favouring any great language, or empire, has a distinctly political flavour. (2) The literature concerning methodology and theory of archaeology is published overwhelmingly in English. There are two reasons for that: (a) the majority of "theorists" come from Anglo-American countries and speak English as their native language; in addition (b), this is the domain of archaeology where the scientists from different countries actually meet, where they have genuine interest and immediate need to understand each other (the researchers from outside the linguistic mainstream have an additional need to make themselves understandable for the largely monolingual theorists). (3) The percentage of the references that point to the works published in the neighbouring countries is rather small; the literature published further abroad is virtually not referred to at all (except the issues concerning methodology and theory) - this applies irrespective of language.<sup>4</sup> The situation, which results from the local nature of the object of study of archaeology, raises the question of the expediency of publishing in foreign languages. (4) In comparison with the developed Nordic countries - let alone the great nations - the share of the archaeological literature in Estonian is far too small - one could say dangerously small - in Estonia, and needs to be increased. (5) A tendency which is related to the last one, but cannot be measured, is obvious to everyone who is more aware of the issue: the more archaeological literature gets published in any native language, the better known and popular is local prehistory among the educated people. The welfare of archaeology, in its turn, to a great extent depends on its popularity. The more popular the prehistory, the more finds are brought to museums (*i.e.* into scientific circulation), the more sites are discovered and the better the protected sites are preserved.

#### SCIENCE AND NATIONAL CULTURE

It is therefore in the interest of archaeology as a national science to have a decent amount of liter-

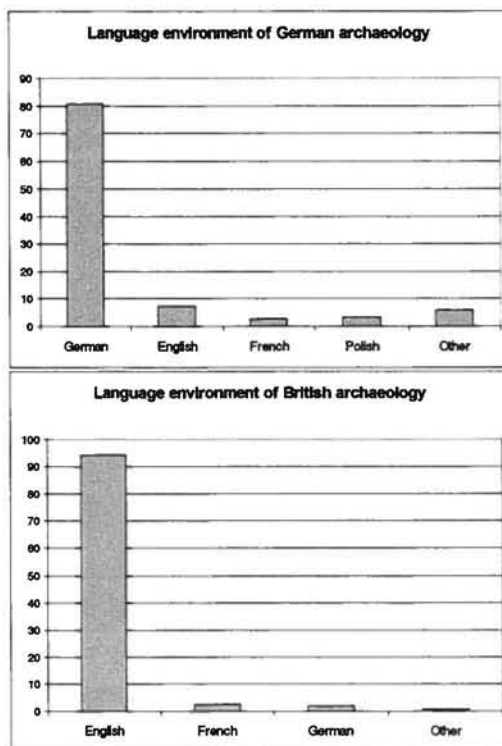


Fig. 2.

ature available in the native language. While choosing the language of science, especially in the case of national sciences, the interests of the national culture as a whole should also be considered. As Ea Jansen and Heldur Palli put it (1999), the national culture - of which science constitutes an organic part - is an integral system, based upon a native language communication network. If this system becomes flawed, the whole structure may collapse. Any experimenting in this field would be particularly dangerous for a small nation like Estonians, who are in imminent danger of regressing into an ambiguous ethnic group in the periphery of Europe with their native language only surviving in the status of a familiar household and kitchen vernacular. The Mari and Erzya-Moksha people, for instance, larger in number than Estonians and with very rich archaeological heritage, cannot use their native language in archaeology - the language of science is Russian. Hence follows the moral obligation of the researchers of exact and technical sciences to publish at least part of their work in their native language. If we do not write about the results of our studies in the lan-

guage we speak, its scientific terminology will inevitably degenerate and, before long, we will be simply unable to think scientifically in our mother tongue.

The science, archaeology included, does not care in which language people think about it. However, as the free citizens of a free country we need to care in which language we think about our culture and ourselves (Talvet 1999). It is not important, for instance, for the Latvian archaeology, whether any outsider - a foreigner living abroad - understands it; this would make Latvian archaeology neither better nor worse. But the understanding of Latvian prehistory may prove quite important for an archaeologist from the neighbouring Estonia, if he wants to advance the archaeology of his homeland. It is thus solely a personal concern of his whether and to what extent he understands Latvian. I would hereby like to argue against the assertion that publishing in national languages would foster non-competitive science. Only the lack of competition between scientists can foster non-competitive science. While the researchers of exact sciences face, due to the universality of their object of study, extremely intense competition, this is not the case with their colleagues studying national sciences - at least in the small post-communist countries like Latvia and Estonia. The small number of the researchers of national sciences have brought about the situation in which every scientist is immersed in his narrow field of study where nobody else has any business, the more so that the others are also wrapped in their own research. Publishing in English would not improve the situation in the least - due to the specific (*i.e.* local) nature of the object of study no outsider could enter the competition nor evaluate adequately the research conducted locally (with the exception of theoretical studies, which is only a part of archaeology). The only way to rise the standard of national sciences is to increase the number of researchers, thus intensifying the competition at home - this, however, requires sharp increase in funding.

With the above I do not want to claim that the national sciences are merely phenomena within one state or nation. Estonian prehistory is an organic part of the prehistory of the Baltic Sea region; this in its turn forms a part of European prehistory, *etc.* Archaeology can be called an international national science. Hence the two most

essential duties of archaeologists of any country: (1) to study their section of the large and heterogeneous whole and (2) make their results available to the colleagues abroad. While the first duty can be carried out in any language, the other one apparently requires the publication of the results in some common language, *lingua franca*. In international refereed and indexed periodicals, of course, some would like to add. Yet there exists an alternative approach within the national sciences that is not so oppressive for the national language and culture: supplying the native language articles and monographs with decent foreign language summaries providing overviews of the methodology, theoretical basis and principal result of the research. Likewise, it is important to publish foreign language reviews of the achievements in the field of each discipline periodically, participate in international research projects, *etc.* Larger archaeologies possess the necessary space and means for publishing scientific periodicals in foreign languages (in northern Europe most often in English or German), for example Fennoscandia archaeologica in Finland, Norwegian Archaeological Review (in Norway), Acta Archaeologica in Denmark, Archaeologia Baltica in Lithuania, *etc.* In the above cases, the foreign language journal complements the periodicals in native language (*i.e.* does not substitute them) and is at the same time open for the contributors from abroad. Estonia lacks similar journal as the local body of scientists does not comprise the necessary critical mass, but we have, for decades, annually published the preliminary results of field works in English, German and Russian, which enjoy an equal standing in the region.

#### ARCHAEOLOGY AND THE RI-PERIODICALS

Another issue to be treated separately is the claim according to which the best criterion for the high standard of a scientific study is the publication of its results by international refereed and indexed periodicals. No doubt, this is the case in "real sciences", where there is nothing to argue about. But if one has in mind the archaeological literature of northern and northwestern Europe, which contemporary scientists have to work with, then it has to be said that over 99 per cent of it have not been published in these periodicals. For the "soft" national sciences the cult of indexes has no urgency

because in their case the way of spreading and circulating the scientific data differs from that of exact sciences. In the sphere of humanities, the immediate publishing and the without-delay-communication of one's invention or discovery to the international public in an indexed journal, which, after all, serves to insure the researchers claim to be the first, are no priorities. The information does not become obsolete in archaeology as quickly as in physics, it seeps into international circulation much more slowly. The main means of communication in humanities is a monograph, which provides a thorough account of a process, problem, *etc.* For the researchers a good monograph retains its topicality for decades, occasionally for more than a century, providing a basis for factual supplements and the development of new directions of research. A proper native language monograph, firmly founded in theory and plentiful in facts, serves several purposes: it is a source of information and aid for the fellow researchers at home, a valuable material for an intellectual reader, and a basis for comparison with the research results of other nations (Jansen & Palli 1999). Without similar reliable database, any comparison of the kind would remain groundless. If a study possesses real quality, it will sooner or later become globally acknowledged - via reviews, introductions, or references. The translation of originally national-language monographs into, for example, English is not uncommon for archaeology. However, if the study does not possess the necessary quality, its presentation in any language is pointless - a treatise of that kind belongs to a dustbin (Talvet 1999).

Yet, ever so often the researchers of humanities are urged to publish their results in RI-journals. In the field of archaeology, very few such periodicals exist, particularly in northern and northwestern Europe. The problem has two possible solutions: to continue explaining the meaninglessness of index-cult in the humanities to the local bureaucrats of science, or, create a situation in which every proper periodical of archaeology is indexed and refereed somewhere. While, sadly enough, Nordic Archaeological Abstracts is not published for a long time, the demand for that kind of journal has only increased.

## CONCLUSION

Returning to the issue of language, I remain unconvinced that archaeology and other national sciences would gain anything if they were to be pursued in English only. That they would suffer, is certain. We have been created linguistically divergent and culturally different - why should we choose to change that? Why should we choose to make the world duller and culturally homogeneous? The champions of monolingual science probably hope to spare the effort of studying languages, but are going to suffer heavy losses elsewhere - the impoverishment or collapse of native-language culture, ignorance about neighbouring languages and cultures (the familiarity with which is essential for national sciences), and a limited, one-sided orientation towards the Anglo-American way of thinking. However, as a historian I am optimistic about what the future has in store: in the political system we had to endure not long ago, Russian was proclaimed to be the only language of future; a little earlier German was considered to have the same status. Our social memory fails to even contemplate the times when Latin dominated science and culture. Perhaps the hankering for English is going to wane as well.

## ACKNOWLEDGEMENT

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## NOTES

1. Sciences with a locally (state, nation) defined object of study are traditionally called national sciences in Estonia; however, they have nothing in common with nationalism as such.
2. It takes too much space to print here the titles of all these issues I used. It was a random selection based on available books in the libraries of my own and the Institute of History. Everyone interested in the subject can repeat this experiment himself.
3. It appears that the selection of references also depends on the particular publication. Thus the references in the articles of the Finnish archaeologists published in *Fennoscandia archaeologica* differ considerably from what can be referred to as the Finnish average.
4. To be sure, the frequency of referring to the literature published in the neighbouring countries is to some extent higher than can be inferred from the linguistic analysis of references. Thus, the use of Latvian, Finnish and Swedish archaeological material by Estonian archaeologists is not limited to the works published in these languages alone (2.7. - 4.8. per cent), but is also based on the texts published in great languages. However, this does not alter significantly the general conclusion that archaeologies of the neighbours are relatively little used.

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