

REVIEW OF / RECENSIÓN DE: Kristian Kristiansen, Guus Kroonen and Eske Willerslev. *The Indo-European Puzzle Revisited. Integrating Archaeology, Genetics, and Linguistics*. Cambridge University Press. Cambridge, 2023, 575 pp. ISBN: 978-1009261746. Online ISBN: 9781009261753 DOI: <https://doi.org/10.1017/9781009261753>

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This important volume is the publication of a colloquium held in Gothenburg in May 2018 on the Indo-European question, i.e. on the historical explanation of the emergence of the Indo-European language family, languages which, today, are spoken in a large part of the world. The book brings together contributions from over thirty researchers from Denmark, Russia, the Netherlands, Norway, Finland, Germany, the United States, the United Kingdom, Sweden and Ireland. It is coordinated by Kristian Kristiansen, a world-renowned archaeologist who was the first president of the European Association of Archaeologists (EAA); Guus Kroonen, a linguist specialising in Germanic languages, and Eske Willerslev, who directs palaeogenomic research at the University of Copenhagen, one of the leading laboratories in this field.

The Indo-European question emerged at least three centuries ago when the German philosopher Leibniz pondered the relationship between Indo-European languages in his *Nouveaux essais sur l'entendement humain* (1704, in French). He (already) saw their origins in the Black Sea regions. Anglo-Saxon historiography usually attributes the discovery of the kinship of European languages to the colonial administrator William Jones, but forgets that there is no linguistic demonstration in his famous lecture delivered in Calcutta in 1786 and that he concludes by saying: “The Hindus [...] had an immemorial affinity with the old Persians, Ethiopians, and Egyptians; the Phoenicians, Greeks, and Tuscans; the Scythians or Goths, and Celts; the Chinese, Japanese, and Peruvians; whence, [...] we may fairly conclude that they all proceeded from some central country”—an assertion that would normally come under the heading of ‘scientific madness’. It was German philology, with Bopp, Schleicher and finally the school known as the ‘New Grammarians’, that defined the precise relationships between these languages and put forward the hypothesis of an original language (*Ursprache*), spoken somewhere in an original home

(*Urheimat*) by an original people (*Urvolk*) who then spread this language and its descendants throughout Europe and western Asia, just as the Roman conquests led to the present-day Romance languages. As for the original home, countless localisations have been proposed (Mallory, 1989), but three main ones remain. The first is Scandinavia, as proposed by the German archaeologist Gustaf Kossinna, a professor in Berlin, at the beginning of the 20th century; but it is not based on any archaeological argument, even if current extreme right-wing movements continue to claim it. The second is Ukraine and southern Russia, proposed in the 19th century by the philologist Otto Schrader, then in the 1920s by Gordon Childe, and finally in the 1970s by Marija Gimbutas, followed by James Mallory and David Anthony, with more developed demonstrations. The third is the Near East via Central Europe, proposed at the beginning of the 20th century by Max Ebert and Adalbert Sayce, later by Pedro Bosch-Gimpera and the linguist Aaron Dolgopolsky, among others; it was this hypothesis, that identifies the spread of Indo-European languages with that of the Neolithic in Europe, that Colin Renfrew took up in 1987 with great success, to the point where it became dominant over the following decades.

However, a shock came in 2015 with the publication of two palaeogenetic papers from the Jena and Copenhagen laboratories, respectively (Haak *et al.*, 2015; Allentoft *et al.*, 2015). These papers showed that the bearers of the Corded Ware, a Neolithic culture of northern Europe extending from western Russia to Denmark in the first half of the 3rd millennium BCE, had a high degree of genetic proximity to the bearers of the Pit Grave Culture which extended earlier and at the same time into the steppes of Ukraine and southern Russia. The Russian name for this culture is ‘Yamnaya Kultura’ (or *Pit Culture*), because important figures were buried at the bottom of a pit itself covered by a tumulus or *kurgan*, and the Anglo-Saxon scientific literature now uses the term ‘Yamnaya’ to refer to its

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bearers (see Heyd *et al.*, 2021). An initial colloquium, in which I participated, was therefore organised in September 2015 in Jena, the headquarters of one of the two laboratories, bringing together archaeologists, geneticists, and linguists to draw all the conclusions from these two studies; it led to the consensus that there was still no consensus.

Nevertheless, a new narrative was proposed by Kristian Kristiansen and his colleagues (Kristiansen *et al.*, 2017). In short, some Yamnaya people, perhaps as a result of climatic degradation, left their region of origin around 3000 BCE. Mainly pastoralists, they would have headed north-west with their carts, oxen, and horses, enjoying excellent health thanks to the dairy products they were able to assimilate with a recent genetic mutation and a more meat-based diet. They would also have carried the plague, to which they were naturally immune. As they advanced, they would have burnt parts of the forests to encourage grazing for their herds, while contaminating the local populations with the plague, whose men would also have been massacred. Marrying widows willingly or unwillingly, they would have spread their genetic haplogroup R1a. At the same time, their new local wives would have reproduced in clay the containers they brought with them, but which have not been found, being made of perishable material. These new vessels formed the typical pottery decorated with cord impressions that gave their name to this new hybrid culture, known as the Corded Ware culture. They also carried a primitive Indo-European language, which evolved into the early Germanic languages, since it is precisely in this region that they are largely found. In the end, they may well have been “the most violent people of all time”, as several media have proclaimed.

The symposium held in Gothenburg aimed to test this general hypothesis, and it has to be said that its 23 chapters, organised into six sections, provide a great wealth of information from archaeology, linguistics, and genetics. The first part of the book describes the pastoralism of the Yamnaya culture, and also looks at the relationship, under debate, between the Anatolian languages (Hittite, Phrygian, etc.) and the rest of the Indo-European language tree. The second part looks more specifically at Corded Ware culture, from both an archaeological and a genetic point of view, but also from a linguistic point of view, by investigating the words for metals in Indo-European languages. The third part looks more specifically at the phenomenon known as the Bell Beakers and their cultural descendants, in particular the historical Celts, what we know about their languages, and the links between them and the other languages of the Indo-European family. The fourth part looks at several objects emblematic of the debate, namely the chariot, the hearth, and wool, using a combination of

archaeology, genetics, and linguistics. The fifth part deals with family relationships that can be deduced from both archaeology and genetics, and in particular female exogamy and fosterage. Finally, the concluding remarks, along with those in the introduction, both written by Kristian Kristiansen and Guus Kroonen, summarise the main conclusions of the volume, while referring to the debates that are still ongoing.

Faced with such a wealth of information, it is obviously impossible to give a detailed account of the various chapters. At least, the overall impression is one of great intellectual honesty, with many of the contributions tending to qualify, often significantly, an over-simplistic migrationist, if not catastrophist, narrative. In fact, the arrival of migrants from the steppes did not represent a major cultural break. The dissemination of the new genetic heritage may also have been the result of a particular matrimonial system or even the existence of nannies ensuring a higher birth rate, especially as evidence of massacres is very rare and concerns women as much as men. Genetics confirms the exogamy of women, but this has been attested to since the beginning of the Neolithic period, as has the consumption of dairy products. As for the increase in meat consumption that can be seen in the chemistry of human bones, it may also be due to animal manuring of cereal fields. Horses are rare in the Corded Ware culture and are not of steppe origin, while horse riding did not appear until the second millennium BCE. Lastly, the tree model of Indo-European languages was undoubtedly much more complex than the usual representations, especially as the place of Anatolian languages is still under debate and, in any case, we only know a tiny fraction of the languages spoken in ancient times in Europe, most of which were collected relatively recently.

The editors of the volume also emphasise the ‘third scientific revolution’ that the advent of genomics, Big Data, and isotope analyses have brought to the history of archaeology, following its introduction in the 19th century and the development of Carbon-14 dating from the mid-20th century onwards. Of course, genomic analyses have provided invaluable new informations, but it is equally true that the methods and techniques of the natural sciences have continued to accompany the progress of archaeology, without any real threshold or break with the past. From this point of view, it is undoubtedly the methods of social anthropology that would benefit from being called upon more here, since the dilemma is not between migration and evolution *in situ*, and the search for much more complex models of interaction between societies and between languages would undoubtedly be very suitable.

One last (small) comment. The authors of the introduction attribute to me “a post-factual narrative

[...] that calls the reality of the Indo-European language family itself into question”. This is undoubtedly a problem of poor understanding of the French language and, with the English edition of my book, it will be possible to verify that I never wrote anything of the sort (see, for example, Demoule, 2023, p. 451). But, indeed, the publishers are also aware of the ideological misappropriations that have taken place, and continue to take place, concerning the Indo-European question.

In any case, this volume represents an important step forward in our understanding of the historical phenomena that transformed the history of Europe during the third and second millennia BCE.

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