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The authors declare no competing interests.

Archaeogenomics

Tracing the early history of the Slavs

Steffen Patzold

A study examines the emergence of a group that sparked a fundamental change in lifestyle in Central and Eastern Europe in the sixth century. **See p.384**

In the sixth century, authors in the Roman Empire began writing about a previously unknown large group in Eastern Europe: the 'Slavs'. The group's early history has been the subject of heated debate between historians and archaeologists for decades. On page 384, Gretzinger *et al.*[1] provide crucial ancient DNA evidence for analysing the emergence of the Slavs.

Today, millions of people in Europe identify as Slavs, either because they speak a Slavic language as their first language or because they are citizens of a Central or Eastern European country where a Slavic language is the official language. Despite the group's cultural and political importance, historians and archaeologists do not have a clear picture of the early history of the Slavs. The only certainty is that the term 'Slavs' first appeared in writings from the eastern part of the Roman Empire in the sixth century. One of its early users was Procopius of Caesarea. He served as an adviser to the Roman general Belisarius until AD 542, participating in his military campaigns before settling in Constantinople, the capital of the Byzantine Empire (also referred to as the Eastern Roman Empire). Around AD 550, the historian Jordanes wrote about the Slavs in his Latin work *Getica*, a history of a group known as the Goths. Greek texts referred to them as '*Sclavenoi*,' whereas in Latin texts they were called '*Sclaveni*' or '*Sclavi*'. Roman authors located them north of the Roman Empire in Central and Eastern Europe[2,3] (Fig. 1).

There are no written accounts by members of the group because they did not read or write. Therefore, it is not known whether the name 'Slavs' was imposed on them by Roman intellectuals or whether they identified as a large, cohesive group with a common name (an ethnonym) at all. In fact, nothing is known about how these people thought and talked about themselves, their origins or their history. There is also no solid evidence of the languages they spoke before the late ninth century. The lack of written sources has consequences. Everything that historians can say about these people is based on statements made by people of a different culture – and deeply influenced by Roman ethnographic traditions for perceiving and describing others.

Archaeologists have found evidence of profound cultural changes in Central and Eastern Europe since the sixth century. From the available archaeological evidence, it seems that almost every aspect of life in this region began to change around the time that Roman authors first mentioned '*Sclavenoi*' and '*Sclaveni*'. People there started using different homemade and undecorated pottery, living in simple houses, working with modest tools, using hardly any metal and cremating their dead[4,5].

How can this enormous change in material culture and lifestyle in such a large area be explained? So far, historians and archaeologists have discussed two models: either a large number of people immigrated into the region from the sixth century onwards, bringing with them a different way of life; or people in the region profoundly changed their lifestyle[6].

To address this issue, Gretzinger *et al.* analysed genome-wide data from 555 individuals buried mainly between the third and twelfth centuries in the Elbe–Saale region of present-day eastern Germany and other sites in present-day Poland, northwestern Ukraine and the northwestern Balkans (Fig. 1). The authors' results strongly support the immigration model: populations in Elbe–Saale and other sites in Central and Eastern Europe underwent profound genetic change from the

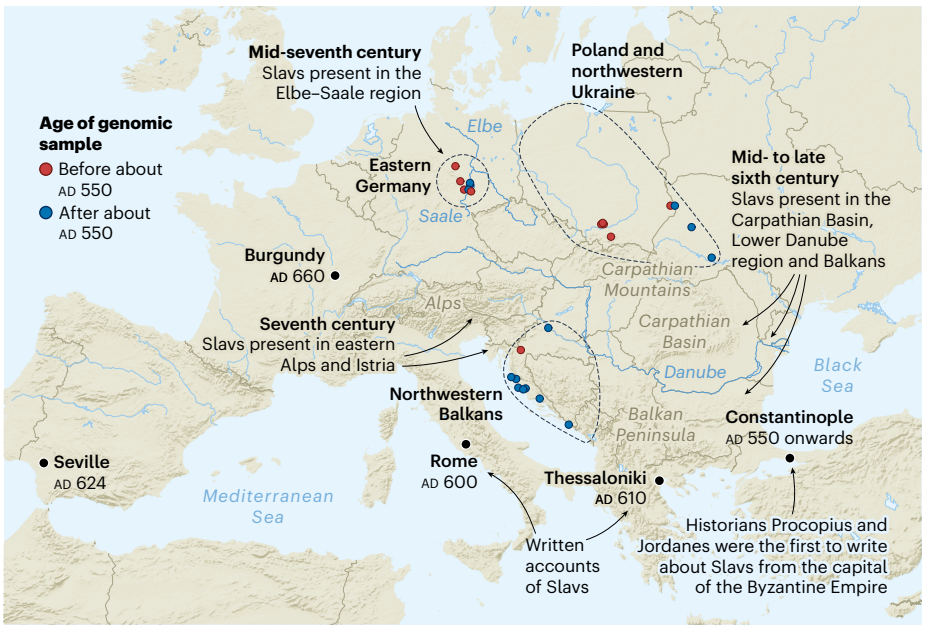

Figure 1 | Analysing the early history of the Slavs. Around AD 550, Roman authors in Constantinople were the first to write about the emergence of a large group of people in Central and Eastern Europe whom they called 'Slavs'. However, for many years, this knowledge remained limited to the capital of the Byzantine Empire. Because of the scarcity and limited regional scope of written records, it is difficult to evaluate the lifestyle changes that archaeologists observe in this region from the sixth century onwards. Were these changes because of large-scale immigration, or did the people already there adopt a new lifestyle? Gretzinger *et al.*[1] analysed genome-wide data of individuals buried in Central and Eastern Europe around the time the term 'Slavs' first appeared. Their analysis mostly supports the immigration model, with profound genetic changes in these parts of Europe accompanied by a small amount of genetic mixing. Coloured points indicate the burial locations of the 555 ancient individuals whose genomic data were generated for the study. Encircled regions indicate the entire area in which previously published samples, which were also included in the authors' analysis, were located. (Adapted from Fig. 1 of ref. 1.)

sixth century onwards. They argue that several waves of immigration occurred and that these waves did not completely displace the local population. Instead, immigration was accompanied by genetic mixing. At least some of the region's inhabitants remained and adopted the immigrants' way of life. As the authors note: "'The Slavs' were the result, not the precondition of the movements".

As well as the changes in material culture already identified by archaeologists, the authors reveal deep social changes visible only in genetics. Unlike before the sixth century, local societies were now organized such that young men usually remained in their settlements and women moved to marry at other places. Inheritance was mainly through the male line. People buried their dead alongside close relatives. In several cases, it is evident that a man fathered children with multiple women. Whether they had these partnerships concurrently or sequentially is unclear, however. Unlike in societies in the Carpathian Basin (which spans present-day Hungary and surrounding countries) at that time[7], there is no evidence of levirate marriage in the study area: men did not marry their brother's widows. The Slavs also avoided marrying close relatives, including first cousins.

The ways in which people marry, pass on their inheritance to their children and bury their closest relatives are fundamental aspects of social life, especially in small agricultural societies. Gretzinger *et al.* provide impressively robust data on these topics for three large regions of Central and Eastern Europe. Their study is a solid foundation for all future research on the drastic changes that marked the early medieval history of Central and Eastern Europe.

To this day, the terms 'Slav' and 'Slavic' carry a lot of political weight. Since the nineteenth century, these terms have been associated with nationalist ideas, and they have repeatedly fuelled pan-Slavic politics: the idea that all Slavs should live together in a single state. Consequently, the concept of 'Slavic' remains one of the foundations of Russian imperialism. Gretzinger *et al.* use the words 'Slavs' and 'Slavic' cautiously. But given the terms' current political importance and role in identity politics, I wonder whether even more clarity is needed in scientific terminology. The authors use the term 'Slavic' to refer to part of their study period ('the Slavic period'); for archaeologically identifiable cultures ('Slavic cultures'); for a family of languages ('Slavic languages'); for groups of people ('Slavic groups'); and, in a deliberately vague formulation, they even mention "ancient individuals from Slavic-associated contexts".

Clearly, the adjective 'Slavic' cannot mean the same thing when referring to a historical era, an archaeological culture, a language family, a human group and an individual. Not everyone who speaks Mandarin or eats Peking duck identifies as Chinese or is a citizen of China (and vice versa). However, the conflation of language, practices, material culture, social identifications and biology has been integral to identity politics for centuries, and ethnonyms have been the most powerful linguistic tool for this. It is high time for new terminology that enables science to be distanced from the political uses and abuses of ethnonyms. Interdisciplinary collaboration will be key to this endeavour.

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The author declares no competing interests.
This article was published online on 3 September 2025.