## KOSSINNA, CHILDE AND aDNA

Comments on the construction of identities

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Scientific archaeology, particularly the results of isotope analyses and aDNA studies, is highly appreciated in European archaeology. These methods add different categories of evidence that provide further knowledge to traditional archaeology. In German archaeology, natural sciences and the integration of scientific methods into projects and analyses are integrative approaches in general. Research applications which do not refer to scientific analyses are more or less outdated.

Thus, the main question to be asked is not whether the huge spectrum of different scientific analyses should be conducted or not, but rather: Does a theoretical and methodological agenda exist to evaluate the anthropological/cultural significance of the new results? What do the analyses contribute to our goal of writing the history of non-literate societies and how do they contribute to an anthropological understanding of history and society?

In my opinion, a good example of a debate that has not yet ensued would focus on the benefits of aDNA analyses for the reconstruction of prehistoric societies. Especially in Germany, research history is confronted with the misuse of scientific data; for example, physical anthropologists before and during Nazi times used physical differences of individuals to reconstruct purported Nordic, western and other "race-dominated" societies. The constructed racial background of, e.g., prehistoric individuals was used to identify ethnic groups. The question was never asked, which aspects of human life trigger the creation of identities and the accompanying construction of societies. Already before Nazi archaeology, Gustav Kossinna, who used ceramic pots to identify ethnic groups, constructed a more or less similar one-dimensional story. Seen from the present, both Childe and Kossinna adopted the "Zeitgeist" of ethnicity and racism.

Obviously, the recent debate about aDNA methods lacks a link to social and cultural theories on the construction of identities and societies. If we read palaeo-genetic research articles, the impression often arises that haplotypes are responsible for why certain individuals were together with whom and why not. To be perhaps provocative: Is there any verified link between genetic attributes and the construction of societal identities? How were social identities and societies as historical players constructed on different spatial scales? On the local level, the reconstruction of some lineages is possible, but the example from Eulau displays the problem when one attempts to translate genetic lineages into social lineages. From the discourse about "sex and gender" we already know that social roles are social products and not necessarily biologically distinct. Human societies are human made and not biologically determined.

This does not imply that we do not need aDNA analyses: *the opposite is the case*! Especially the statistical analyses of aDNA analyses available for the Early Neolithic Linearbandkeramik culture in Central Europe are able to show that we are dealing with some kind of "melting pot" and not with a racial unity of people from *c*. 5500–4900 BCE. In contrast to the Kossinna-like handling of moves and migrations reconstructed in many studies, rigorous analyses and interpretations of aDNA analyses might create awareness and the basis for anti-racial arguments for political discussions within our recent societies.

In contrast to aDNA studies, isotope analyses were already reduced in their first "pure" interpretation, which was necessary. Besides dealing with problems of the method for distinguishing "local" from "nonlocal", the discussion changed from the question concerning "where from?" to the goal of reconstructing social space on local and regional scales. But even here, a theory of mobility and migration should be integrated in a closer way.

In sum: The 20th century did see archaeology involved in misinterpretations. Both Kossinna's and Childe's ceramic styles or material culture as "ethnic groups" as well as the underlying racial dominance concepts in constructing societies by anthropological differences in skeletal remains by Nazi archaeology are examples of data misuse. For the 21st century, we need a discourse on theories of the archaeological reconstruction of societies: Only this would emancipate aDNA, isotope or other scientific studies from the dangers which are obvious in simplified 20th-century interpretations. Moreover, this is not a case of scientific archaeology versus archaeology, but of archaeology and anthropology in relation to the new innovative methods in general.

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