

Documenta Praehistorica XXXIII—13th Neolithic Studies Edited by Mihael Budja

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The 33rd issue of the *Documenta Praehistorica* journal is the 13th volume in the Neolithic Studies series. It contains selected papers from the 12th international Neolithic Seminar, held at Ljubljana University in 2005 and entitled "Prehistoric Gene Flow and Cognitive (r)Evolution: Inferences on the Neolithisation of Eurasia". The volume presents 22 contributions, all in flawless English, dealing with different facets of the Mesolithic-Neolithic transition in Europe and the Near East. The seminar's aim of combining genetics with archaeology is evident from the mixed background of the contributors: the volume opens with a paper on climatic records for archaeology and is followed by four genetics papers, two theoretical discussions about combining genetics and archaeology, and fifteen case studies of Neolithic-transition archaeology in specific areas.

The opening contribution, an ambitiously titled paper by Gamble et al., "The Late Glacial ancestry of Europeans: Combining genetic and archaeological evidence", presents the results of these authors' ongoing research on correlating radiocarbon data from archaeological sites with past climatic oscillations, as revealed by the GRIP ice-core stratigraphy. These authors use the frequencies of known radiocarbon-dated sites to infer levels of human activity for each region and time period, and link them with archaeological taxonomic units. They argue that five population events occurred from 25,000 BP to 11,500 BP (1. an Iberian Solutrean refugium in the LGM; 2. an initial Magdalenian demic expansion throughout Western Europe; 3. a widespread demic expansion of Late Magdalenian peoples northward from 16,000 BP to 14,700 BP; 4. a population stasis in which Epipalaeolithic open-air sites remained important while the use of rock shelter or cave sites declined rapidly; and 5. a minor population

contraction during the Younger Dryas which led to the Mesolithic). The arguments are well-presented; such a big-picture approach cannot be disproven by specific archaeological assemblages because the scales of study are so large. Alas, the authors rely heavily upon unexplained jargon, which might deter readers (e.g. page 7, “a time-transgressive interpretation between palaeoclimate archives at different latitudes”). While the paper makes use of climatic and archaeological data, it does not combine these with genetics as much as the title implies. Rather, genetic data for population expansion are discussed briefly as a background motivation for the research, showing the potential for future collaborations.

Phylogenetic studies of genetic distributions focus on Y chromosome variation in living populations. Peričić and colleagues seek to identify the geographic origins of Palaeolithic and Neolithic haplogroups, while Rootsi’s study of haplogroup I seeks the sources of LGM refugia in Europe. Marjanović and colleagues review the history of genetic investigations in Bosnia-Herzegovina and present the latest findings, discussing the implications for the peopling of this region. A study of ancient DNA is presented by Lidén and colleagues, showing that a certain gene deletion existed in modern frequencies as far back as the Mesolithic in Sweden. These four papers also appear rather unidisciplinary in that they only fleetingly mention archaeology, if at all. This is not surprising since 19 of the 21 authors of these four papers are geneticists. Although they must all be involved in archaeology to have participated in the seminar, Lidén et al. provide the best example of a true integration between the two disciplines.

The following two contributions offer excellent discussions of how the disciplines of archaeology and genetics have interacted historically and the methodological differences that can make collaboration difficult. Pluciennik points out that geneticists were often unaware of the debates in archaeology and thus tended to assume that demic diffusion was responsible for the Neolithic transition. At the same time, archaeologists were focusing on cultural, social, and demographic processes that cannot be studied on the large scales that genetics provides. Pluciennik argues that there has been a lack of communication between disciplines. However, some papers in this volume do set a good example, such as

the contribution by Marjanović and colleagues, who clearly recognise the role that genetics can play in informing archaeology. With a slightly more positive tone than Pluciennik, Thomas addresses the same issues and explains how the co-existing archaeological models of demic diffusion and cultural diffusion were transformed into mutually exclusive competitors by geneticists. Thomas goes on to argue that 'the Neolithic' is best seen as a mosaic of processes and causes rather than a single entity. He concludes that 'frontier' regions of contact between indigenous hunter-gatherers and farmers led to long-standing interactions, which favoured innovation in material culture.

Further support for the mosaic theory of neolithisation is presented by Bánffy, based on data from different regions of Hungary. She suggests that the agro-ecological barrier favoured long-term contact between incoming people and locals. Similarly, Nowak argues for 'communicative communities' where Mesolithic peoples merged with Neolithic cultures. Pinhasi also favours the mosaic theory, with his excellent interdisciplinary study of skull shapes from the Central Anatolian plateau. PPN skulls show a distinct vault shape and LBK skulls have a wide regional variation. In stark contrast to the mainstream view from the Palaeolithic, that Neanderthals and modern humans met violently, there is general agreement that contact between local hunter-gatherers and incoming farmers was peaceful. For example, Radovanović reminds us that pioneer groups arriving in the Danube Gorges would have benefited from local knowledge. This is agreed upon by Thomas as well as by Forenbaher and Miracle, who address the questions of migration and local adoption, using a case study from the Adriatic. Roksandic's study of trauma on Danube Gorges skeletons confirms that warfare between the two groups was not common. Further, Budja argues that hunter-gatherers played an important role in allowing pottery to be dispersed in the transition to farming.

The papers show that little is known about the interactions between these two groups. Radovanović argues that Neolithic studies would benefit from knowing more about the hunter-gatherers' networks, movements and environments. She discusses the nature of Palaeolithic-Mesolithic hunter-gatherer lifestyles through ethnographic examples, concluding that it would be incorrect to label their social organisation

as 'simple'. Given that such a positive view of hunter-gatherers prevails throughout the volume, Watkins' long-winded contribution appears out of place. He proposes that neolithisation entailed the modern-like use of symbolism in relation to "larger, more permanent, and richer communities" (page 84) than in Mesolithic populations, implying that hunter-gatherers living today would possess inferior cognitive capacities. Despite this unfortunate argument, the paper presents a thought-provoking hypothesis which is similar to the theory proposed by Haidle (2008) for early hominin evolution: Watkins argues that the evolutionary environment shifted from the biological to the cultural as the role of symbols in material culture increased.

The remaining papers are archaeological reports of specific topics relating to the early Neolithic. Bacvarov discusses Neolithic grave burials; Stefanović suggests that heating houses for giving birth allowed population expansion; Nash presents passage-grave art from the UK; Dmitrijević and Tripković discuss shell ornaments; and Mlekuž and colleagues present a geomorphological study of the Slovenian floodplain. These papers are also lacking in genetic input, although they contain intriguing material. Two gems are the unique and fascinating papers by Petru and Hoppál. Petru offers a multi-disciplinary discussion on colour symbolism in early art and ritual, noting parallels between universals in colour terms around the world and the mineral colours used in prehistory. She integrates many different angles to provide a complete and well-rounded discussion, focusing on red. Hoppál explores the universals of shamanism by using ethnography to predict archaeological evidence for community rituals. He thoroughly discusses the possible connections between rock art and the initiation, healing, music, signs and symbols of modern-day shamanic practices.

The 33rd *Documenta Praehistorica*, in great contrast to the criticisms received by Volume 32 (Gregory 2007), is well-written and well-edited, aside from two particular papers with several typographic errors. The papers have been put into a logical order according to topic. Presentation is impeccable, for example in the layout of the table of contents and the references. The editors have used attractive text, headings and bullet styles,

making the volume easy to read. It is garnished with high-quality images, photos, maps and graphs that only add to its value.

Overall, most of the papers in this volume show an awareness of the larger issues of Neolithic studies, even if some offer very specific case studies. However, the great division between disciplines still remains to be bridged. The overwhelming proportion of archaeological contributions, compared to genetics papers, is certainly a reflection on the current state of archaeogenetics as an emerging field. Nonetheless, the volume greatly benefits from the two theoretical papers of Pluciennik and Thomas. Future issues will certainly see increasing collaboration between geneticists and archaeologists.

References

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