## The Heuneburg demography debate

## By John Bintliff

The discussion paper by Schumann with responses by Krausse et al. is a rather curious animal to a reviewer outside the field of the temperate European Iron Age, although I have often been concerned with demographic reconstructions in the Mediterranean prehistoric and historic world. A number of observations can be made.

Firstly, the arguments are as much about theoretical calculations as they are about 'the known facts'. Indeed 'the facts' at the scale of the entire Heuneburg complex are, it appears, rather few. The limited areas actually dug within and outside the fortified plateau ought to advise caution on extrapolation to the larger unexcavated zones. Then, little attention is given to some well-known 'spoiler factors' in the estimates for population in archaeological settlements. These include: non-contemporaneity of structures; buildings which are ancillary to dwellings; areas and structures for communal use; the size of households (seven to eleven seems high and is never justified – census records for historic households are more commonly closer to five per household)<sup>5</sup>; areas and structures devoted to specialised craft and storage but not part of household complexes. Given such a range of household sizes, from these high proposals to those known more reliably from historic archives, it is surely advisable to focus on the internal evidence from excavated houses, where there might be indications of single nuclear, extended family, or even multiple family occupancy (Souvatzi's [2008] excellent analysis of Greek Neolithic houses provides insightful case studies).

Recourse to eroded and lost buildings is also a risky venture, and it is unfortunate that geophysics has not been successful enough to map the nature of the majority of the so-far unexcavated Heuneburg complex to anticipate excavation, or even replace it if the entire site is not ultimately to be dug (probably true). If we start with uncertain data, extrapolation to large settlement areas introduces the strong risk of creating 'factoids', something that all the authors involved in this debate criticise each other for.

Secondly, I am also critical of the incorporation of nearby rural sites as part of a 'Greater Heuneburg'. In other landscapes, dense farms and intensive food production in the inner territory of urban centres are a response to the food demands of such agglomerations, such as are found around Greco-Roman cities (BINTLIFF 1994; BINTLIFF ET AL. 2007; WITCHER 2006). Furthermore, Krausse et al.'s mention of Roland Fletcher's (2012) 'dispersed urbanism' model seems really inappropriate. The landscape of Angkor Vat in Cambodia, and those of the Maya civilisation in Mesoamerica, consist of square kilometre after square kilometre of equally dense housing interspersed with ritual and political foci, quite different from the radial falloff of housing into genuinely rural densities which all the authors in the Heuneburg debate agree to. The existence of large outer settlements around an acropolis in the Central European Hallstatt or Late La Tène periods, or vast thinly settled 'towns' such as in the Chalcolithic Tripolye culture of the Ukraine and the northeast Balkans, is a totally different settlement phenomenon to the continuous carpets of agricultural housing punctuated by public foci, typifying the genuine low-density urbanism in pre-Columbian Mesoamerica, Medieval southeast Asia, and indeed large parts of modern India, as regional archaeologists and cultural anthropologists have pointed out. Also dubious is the introduction of very high population densities for the Etruscan cities such as Veii: older and recent

Out of numerous historical sources, cf. Caftanzoglou 1994; Russell 1972; Wagstaff 2001.

reconstructions allow for varying degrees of empty areas across these extensive plateau towns, challenging any certainty on population numbers (Spivey / Stoddart 1990; Cascino et al. 2012). The supposed contrast to the early Greek city, or polis, is also mistaken, since here too it is generally agreed that the larger Archaic towns such as Athens, Thebes, Corinth, and Knossos were patchily built-up rather than forming continuous housing surfaces, and just as with temperate European Iron Age urbanism, it is likely that this reflects an internal structure of discrete units based on patron-client and kinship groups (Bintliff 2016b).

As is admitted by the debaters, it is not in any case clear why a range from 2000+ (Schumann) to 5000 (Krausse et al.) people for the Heuneburg complex matters so much, especially since all the authors are forced to play with speculative figures at all stages of their alternative reconstructions. The typical Greek city-state (the 'Normalpolis') ranged from 2000–4000 people, 70–80 % of whom dwelt in the single urban centre (Ruschenbusch 1985; Hansen 2004; Bintliff 2006), so our debated range stands firmly in the scale of sophisticated and highly complex contemporary societies. Indeed, parallels between urbanism and state-formation in protohistoric Greece, Italy, Iberia, and temperate Europe are growing in popularity (Bintliff 2016a; 2016b; Fernández-Götz / Krausse 2016) and show a long-needed trend to ignore traditional divides between Classical and Prehistoric Archaeology in Europe.

It is, however, critical to link simple population numbers and density with social and economic structures. As I have argued elsewhere, building on the cumulative insights of physical anthropologists, social anthropologists, and historical archaeologists (BINTLIFF 1999), face-to-face village communities are commonly observed from the Neolithic to the post-Medieval era in Europe and further afield, and appear to be kept to a demography of less than 200 inhabitants or so in order to maintain social cohesion without internal division. If a settlement rises, however, beyond this level and reaches a size of 500–600 or so, it can be both largely endogamous (whereas smaller communities rely on exogamy) and frequently internalises its lifeworld into itself, beginning to create the behaviours we associate with the initial phases of city-states in ancient and medieval Europe. To resolve the resultant social tensions created by their size, such 'emergent village-states' (cf. Kirsten 1956) require either horizontal divisions (clans, quarters, etc.) or vertical ones (social stratification) to survive. It is thus possible, on the one hand, to find large towns that may be organised through horizontal groupings of a fairly egalitarian nature (although communal decisions may need household or clan representatives to meet); there are suggestions that the precocious early Neolithic town of Çatal Hüyük might be one such example (DÜRING / MARCINIAK 2006). But the Heuneburg evidence clearly draws our attention to the second form of social organisation, a hierarchical one.

The value of inter-regional and cross-cultural comparisons of early states and proto-urbanism is that we can tease out such internal processes and systems. Thus, we can see in the European Iron Age, within the Archaic Greek and Roman world as in the temperate Early and Later Iron Age, the movement of rural elites with their clans / clients into emergent central places. In the process of the creation of a new centralised ruling class, many such centres show discrete sub-groups within them, as the individual aristocrats continue to occupy discrete sectors with their followers (Bintliff 2016; 2017). In the case of the Heuneburg, where there does indeed seem to be clear social stratification, and on any calculation, a 'corporate community' of emergent city-state character, these considerations deserve detailed investigation to bring the Heuneburg 'debate' into a wider and more fruitful arena of scholarly debate at the European level.