The causes of and processes whereby egalitarian societies based on a hunting and gathering economy, which characterized the overwhelming majority of human existence, were transformed into stratified, class societies based on agriculture constitute one of the fundamental questions to be addressed in the study of human cultural evolution.

Agriculture was developed independently in a number of separate locations around the world (e.g., the Near East, Southeast Asia, Mesoamerica, the Andean region) almost simultaneously (in geologic terms) at the end of the last Ice Age (the Pleistocene), roughly 10-12,000 years ago. At first, farming communities remained small and the social structure relatively egalitarian, as it had been during the preceding hundreds of thousands of years when humans relied on hunting and gathering. However, over the next few thousand years, the economies of these societies changed—agriculture became more productive, technology more complex, interregional trade expanded, and populations grew in size. Some villages became towns, and some towns became cities.

As part of this process, the division of labor within society became more complex. Individuals could no longer undertake all of the productive and social tasks required to carry out normal life, as had been the case previously. Administrative control over land and productive forces gradually became alienated to a small segment of the population. And, due to this control, the elite was able to arrogate a disproportionate share of society’s wealth to itself. In short, classes with different roles and interests emerged. By the period known as the Bronze Age in Europe and the Near East, beginning around 3300 BC, highly developed civilizations were emerging in a number of locations, including Mesopotamia, Anatolia, and Egypt.

There is still much to be learned about this process of social differentiation and class formation. How did hierarchical relationships develop out of pre-existing egalitarian social structures based on kinship? Did wealth disparities grow within families or between families, or both? Was the gradual weakening of kinship ties between members of the same social group, which had entailed obligations of reciprocal support, the only mechanism of class formation?

Recent research into Bronze Age populations in Germany provides some insight into a certain aspect of class formation, which may be more broadly relevant. In Europe, aside from the Aegean area, such civilizations did not develop in the same manner as in the territories to the east, with their high degree of urbanization and intensive, often irrigation-based, agriculture. Nevertheless, the process of social differentiation and class formation was under way.

Archaeological and biological indicators of social stratification in agricultural societies are evident in Bronze Age Europe dating from roughly 3200 to 600 BC.

Evidence of class differences between a wealthy elite, exemplified by “princely” burials with lavish grave goods, and a large peasant population was already clear. Marked social stratification has been documented in the central German Unetice Culture (2200-1600 BC), located in a region of especially fertile soil, which was characterized by near-state-level social organization with established armies. However, the peasantry, which constituted the bulk of the population, has generally been viewed as an undifferentiated class of small farmers, in which kinship ties remained the basis of social organization within a single class.

New research reveals that social differentiation existed within the peasantry during this period, at least in one region of Germany, with some members of the population occupying roles based on other than familial ties, such as servants or even slaves. Such “small-scale” stratification may provide clues to an understanding of the origins of the larger-scale class structure.

An article recently published in the journal *Science*, “Kinship-based social inequality in Bronze Age Europe” (Mittnik et al., 10 October 2019), presents a detailed analysis of genetic and archaeological data from the German Lech River valley derived from sites spanning a 700-year period during the Early Bronze Age, marking the economic and social transition from the Late Neolithic to the Middle Bronze Age period (from roughly 2750 BC to 1300 BC).

Based on assessment of genetic relatedness between 104 individuals buried in 45 local farmstead cemeteries plus
additional data, the study finds that in a set of nearby farming communities there existed core groups of families centered on resident male-based lineages (patrilocality), with women from other communities marrying in (female exogamy).

Individuals buried at the same site were more closely related genetically than those buried at different sites, indicating both long-term residential stability of families (more residential mobility would result in greater genetic diversity) and a stable subsistence system that could reliably sustain these communities through time.

Archaeological evidence in the form of grave goods indicates the relative wealth of the resident “core” family, based on the quantity and quality of burial offerings. The more numerous (presumably more prosperous) families tended to have the richer grave furniture.

A correlation in wealth and status was also seen in genetically identified parent/child relationships, indicating a pattern of inheritance. Perhaps most tellingly, this holds true for subadults, demonstrating that wealth and status were ascribed by inheritance rather than being achieved by the individual’s actions in life. Closely related individuals tended to be buried in proximity to each other, further emphasizing status differentiation. At one site, the high-status individuals were interred in burial mounds.

It is notable, however, that both males and females in these core family groups were interred with significant quantities of grave goods, suggesting a degree of social equality between the sexes.

Significantly, two components of the burial populations in these communities do not conform to this model of stratified, kin-based social organization. The first consists of burials of female individuals unrelated to the local families and with indications of having grown up outside the region who, nevertheless, were interred with significant quantities of grave goods, indicating relatively high social status. Their role in the community is unexplained, but their presence suggests some sort of specialization.

The other group consists of individuals also unrelated to the local families, though not of different general ancestry, but this time interred with only poor grave goods. The authors conclude, “Considering both grave furnishing and kinship, people of different status and biological relatedness likely lived together in the same household, which should therefore be seen as complex and socially stratified institutions.” Again, the specific roles of these individuals are unknown, but their position outside of the kinship structure and their low social status, marked by a paucity of grave goods, suggest a subservient position, resembling a domestic servant or farm hand.

In effect, such individuals would represent, in incipient form, a kind of servant or slave class, distinct from the landed peasantry. Their labor would have contributed to the wealth of the core family, with little or no benefit to themselves, at least as indicated in the archaeological record. The use of “supplemental” labor beyond the members of the kin group suggests that new forms of more labor-intensive agriculture, such as use of the plow, may have been introduced during the Early Bronze Age, necessitating an augmentation of the labor force.

How these “outsiders” came to be functionally part of these households, but yet remained distinct, as revealed by treatment at death, is unknown and worthy of further research. Possibly they were war captives (evidence of warfare exists during this period) or they were members of other families that had fallen on hard times, causing their kin group to dissolve, leaving these individuals homeless and without support.

Notably, weapons were found with significantly higher frequency in the graves of males belonging to the core family than in those of the outsiders, suggesting differential socially sanctioned use of force.

The Science authors conclude that “The EBA [Early Bronze Age] households in the Lech valley…seem similar to the later historically known oikos, the household sphere of classic Greece, as well as the Roman familia, both comprising the kin-related family and their slaves.” This suggests that social differentiation and inequality had deep historical roots in early European farming communities.

This study is impressive in its use of detailed genetic analysis to reconstruct multi-generational family trees, which can then support comparisons between distinct family-based social units drawn from a sufficiently large sample size. This, in conjunction with the analysis of grave goods and the spatial positioning of the interments, provides a fine-grained reconstruction of the social and biological structure at a time when these farming communities were approaching a period of dramatic change.

The ability to conduct such studies relies on the collaborative efforts of a variety of specialists. This would not be possible, however, without the collection of data from numerous sites that form the basis for comparative studies, emphasizing the need for the excavation of such sites before they are destroyed by development.