

Chapter 5

Houses in the Archaeology of the Tripillia–Cucuteni Groups

Natalia Burdo, Mikhail Videiko, John Chapman and Bisserka Gaydarska

Introduction

The Tripolye–Cucuteni culture (Ukrainian: ‘Tripillia’; henceforth ‘T-C’) was one of the longest-lasting groupings in east European prehistory. Its overall duration of more than two millennia (5000–2800 cal BC) encompassed an estimated 60–70 human generations; different T-C persons were coeval with the gradual decline of European foraging, the earliest farming in central and north-west Europe and the foundation of Troy, while pre-dating the emergence of the Egyptian, Mesopotamian and Minoan states and the building of Stonehenge phase 1 (Fig. 5.1). It was also one of the largest cultural distributions in what Gimbutas (1982) termed ‘Old Europe’, stretching from the eastern Carpathians in the west to the Dniepr in the east and located in both the forest-steppe to the east and the warm temperate forest zone to the west (Fig. 5.2). The time-space distribution of the T-C group depends upon the shared characteristics of the rich ceramic assemblages, by now excavated from over 100 settlements. The extension of T-C represented the emergence of mixed farming in a large new area.

The settlement domain dominated the landscapes of this huge region, with mortuary remains patchy at best and a very small number of generally small cemeteries. This meant that, as the single most prominent feature in the landscape, large timber-framed houses were, in effect, ‘monumental’ structures making a visual impression

N. Burdo (✉) · M. Videiko
Institute of Archaeology, 12 Geroiv Stalingrada Ave, 04210 Kyiv-210, Ukraine
e-mail: nbburdo@gmail.com

M. Videiko
e-mail: wideiko@gmail.com

J. Chapman · B. Gaydarska
Department of Archaeology, Durham University, Durham DH1 3LE, UK
e-mail: j.c.chapman@dur.ac.uk

B. Gaydarska
e-mail: b_gaydarska@yahoo.co.uk

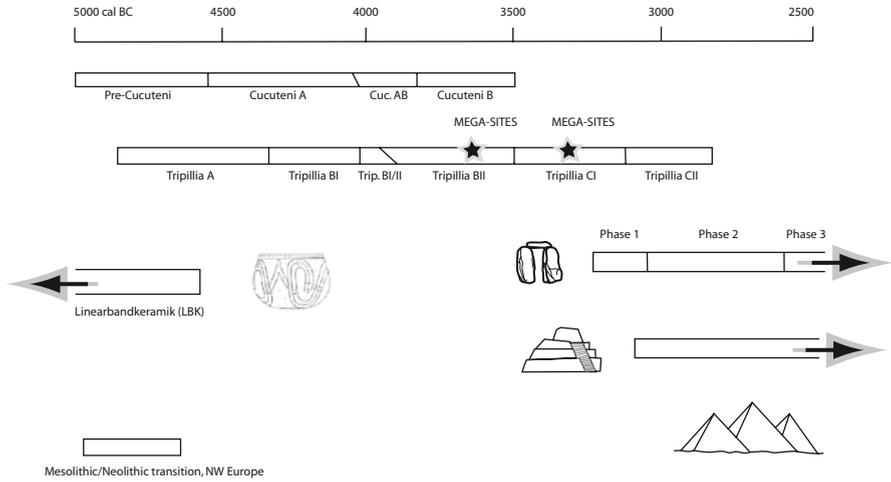


Fig. 5.1 Timeline for Tripillia–Cucuteni development, with key external ‘events’

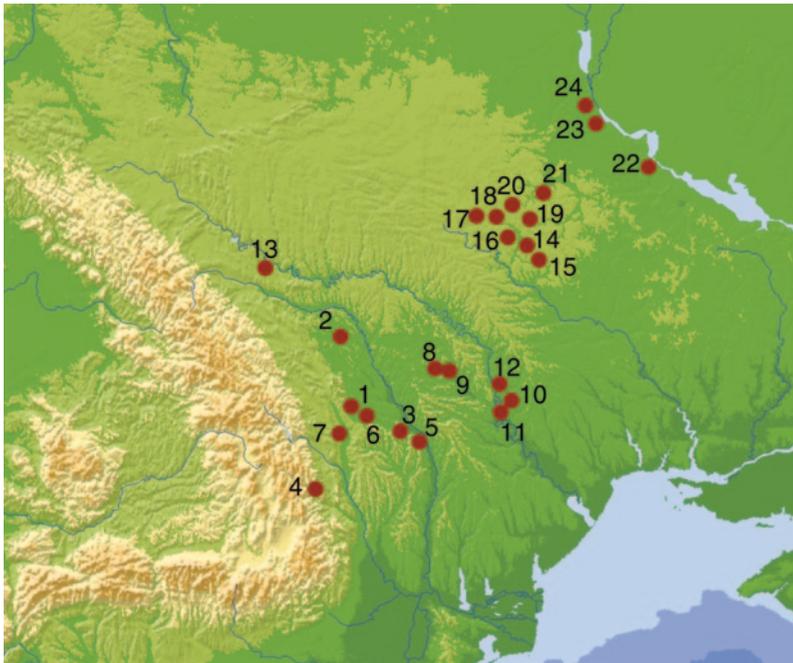


Fig. 5.2 Distribution map of Tripillia–Cucuteni groups, with key sites mentioned in text: 1 Cucuteni; 2 Drăgușeni; 3 Dumești; 4 Poduri-Dealul-Ghindaru; 5 Scânteia; 6 Târgu Frumos; 7 Traian; 8 Varvarovka VIII; 9 Varvarovka XV; 10 Oleksandrivka; 11 Tymkove; 12 Cherkasiv Sad II; 13 Polivanov Yar III; 14 Nebelivka; 15 Volodymyrivka; 16 Sushkivka; 17 Kosenivka; 18 Talianky; 19 Maydanetske; 20 Vesely Kut; 21 Rozsokhuvatka; 22 Pekari II; 23 Kolomyischyna I, II; 24 Trypillia

in their generally rolling terrain. The vast majority of excavated Tripillia settlements reveal a single phase of dwelling, with hardly any house super-imposed on another. In contrast, there is a greater tendency to two- or even three-phase settlements in the Cucuteni group, with the exceptional site of Poduri-Dealul Grindarui forming a tell mound with an occupation of over 400 years (Monah et al. 2003; Mantu 1998). These variations in the temporality of dwelling influenced the Tripillia and Cucuteni social formations, as well as relations between the ancestors and the living.

Throughout this lengthy period and, for the most part over the entire distribution, T-C persons built rectangular timber-framed houses in a single overall tradition of vernacular architecture. However, given the time-place range of the T-C group, it is not surprising that regional traditions developed in architecture. The extent to which they matched the regional ceramic groupings beloved of researchers is an important research question, which we discuss later. However, no matter the size of T-C settlements, people built a broadly similar range of houses for, presumably, a generally common size of family groups. Thus, while the T-C house is fundamental to the T-C phenomenon overall, it is not clear as to what extent the house was central to cultural developments and the apparent evolution towards a form of autonomous, local urbanism.

While the house is one unit of analysis, groups of houses were of critical importance, with combinations of houses into smaller or larger villages and, increasingly in the eastern Tripillia group, massive ‘proto-towns’ with over 2,000 structures. Videiko (2007a) has shown how large settlements of over 50 ha developed even in the Tripillia A phase, peaking in two waves in the Tripillia BII and CI phases in a group of sites in the Uman region of south-west Ukraine. These mega-sites are currently the only exceptions to Fletcher’s (1995) global limits on the size of agropastoral settlements.

Materials

There is a dominant tradition in two millennia of T-C house-building concerning shape and proportionality, as well as size and materials. In the Cucuteni area, the basic form of the house was a rectangle whose length was a little less than twice its width (i.e. a length: width ratio of 10:6; Fig. 5.3). Houses tending to a squarer shape are also found both as very small or very large houses, while there is a tendency for multi-roomed longhouses with lengths up to three and more times their width in the Tripillia C phase (Кричевський 1940, p. 560–561). The vast majority of Cucuteni houses differed from those of the Late Tripillia in having one or two rooms, separated by a partition wall or perhaps screens or hangings that did not leave a mark. A small number of shorter-term, probably seasonal, round huts has been discovered at a handful of sites (Бурдо 2006, p. 56–60; Figs. 12 and 13); the notion of dwelling in pits has been rejected.

House size varied by region, period and site. In the western zone, some Pre-Cucuteni houses (Fig. 5.3a) were smaller than Cucuteni phase A (Figs. 5.3b–d) and

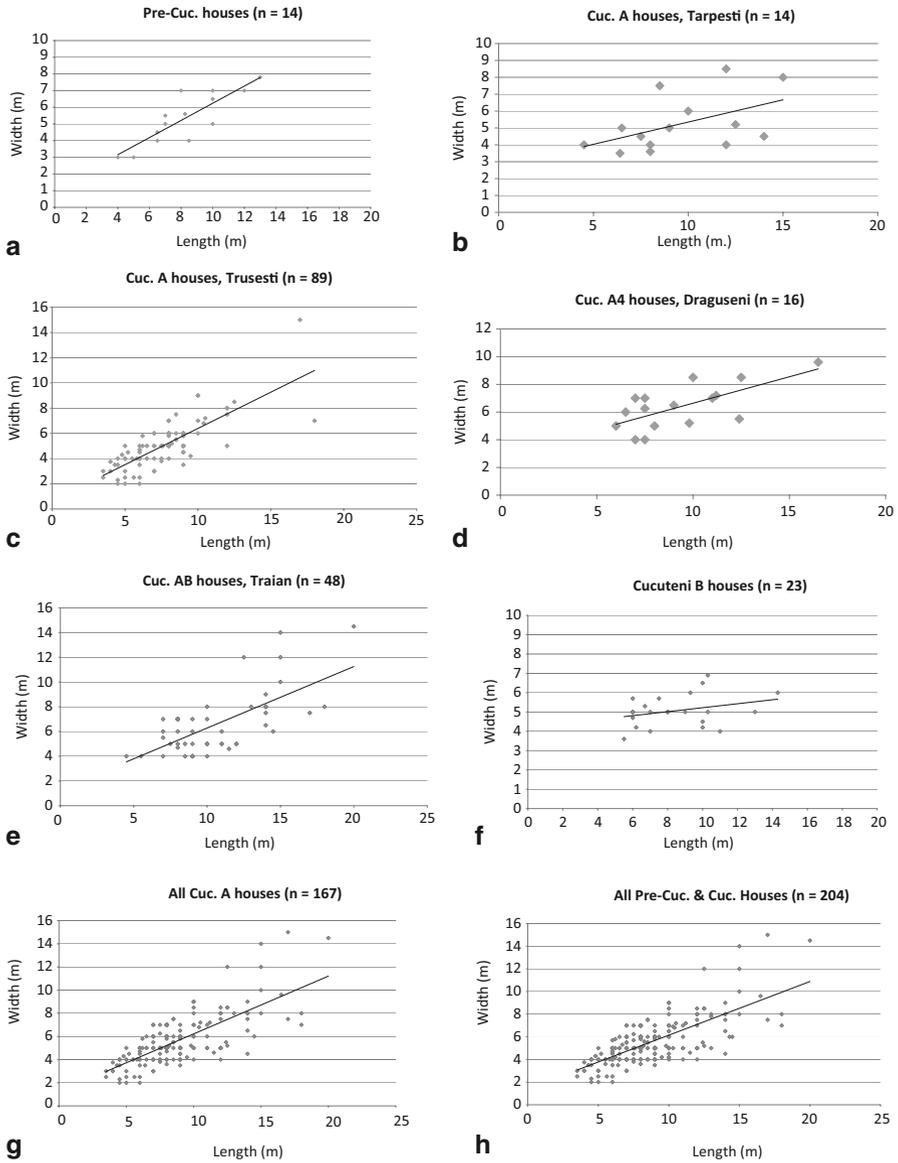


Fig. 5.3 House sizes by region and/or site. **a** all Pre-Cucuteni; **b** Cucuteni A, Târpești; **c** Cucuteni A, Trușești; **d** Cucuteni A4, Drăgușeni; **e** Cucuteni AB, Traian; **f** all Cucuteni AB; **g** all Cucuteni B; **h** all Pre-Cucuteni and Cucuteni

AB houses (Fig. 5.3e), but broadly similar in size to late (Cucuteni B) phase dwellings (Fig. 5.3g). There was an increasingly wide range of variability in house sizes, including some exceptionally large houses, in the sequence Pre-Cucuteni–Cucuteni AB (Fig. 5.3h).

Fig. 5.4 Tripillia phase B-II house model, cf. ‘shrine’, Volodymyrivka



Nonetheless, the peak in house area at 31–40m² remained constant over most of the period from Pre-Cucuteni onwards, until the smaller 21–30m² peak in Cucuteni B. There was rarely more than a handful of exceptional buildings (here classed as over 100m² in floor area) on any Cucuteni site. Interestingly, the five such houses at Traian were not differentiated by specific furnishings, fittings or finds from other, smaller houses at that site (Bem 2007)—they were just larger and more impressive. The same was true for other Cucuteni sites. In the Tripillia zone, we can see houses of different size that in the early (viz., A) period can exceed 100m². Building 2 from the settlement of Alexandrovka (phase Tripillia A III) had two levels, each of which covered over 400m² (Видейко 2005, p. 27–40). Recent geophysical survey at the mega-site of Nebelivka (c. 230ha) has revealed the only Tripillia ‘mega-structure’ so far known (Hale et al. 2010; Chapman and Videiko 2011)—at 60 × 22 m (1,320m²) probably a communal building or chief’s house.

A striking feature of T-C houses is the absence of postholes surrounding the floors. This has led to the reconstruction of houses with sleeper beams supporting vertical trunks (e.g. Marinescu-Bîlcu 2000, Figs. 27 and 28). This technique is believed to have been sufficiently robust to support an important structural and visual feature of a minority of T-C houses from the early phase—the two-storied building. This was first documented in excavations by the late Vl. Markyevich in 1964, although they were discussed by Hvoiko and Kand’ba as early as the 1920–1930s (Markyevich 1981; Маркевич 1990). The evidence was the discovery of ‘double’ floors with the thinner, collapsed upper floor above objects and features such as ovens on the thicker, lower floor. This architectural advance not only effectively doubled the social space available to residents but also increased the monumentality of already impressive buildings in the village landscape. Painted clay representations of two-storied houses are known from the Tripillia zone; a good example derives from the site of Volodimirivka (Fig. 5.4).

The question of interpreting the remains of T-C houses has been discussed for more than 100 years (historiography in Видейко 2005; Бурдо 2006, 2007). A fundamental aspect of these sturdy houses was the construction of the floor in the form of



Fig. 5.5 Excavated Tripillia phase C-I house, Majdanetskoye (Shmaglij—Videiko excavations, 1984–1987)

a ‘platform’, which took the form of either a solid clay floor up to 25cm in thickness or a set of trimmed logs embedded into the underlying soil and covered with a clay flooring. In the western European literature, prehistorians have not always followed Childe (1945) in his use of the Russian term ‘ploschchadki’ for the archaeological remains of a burnt house—often a mass of burnt clay—rather than a specific form of construction. In the Cucuteni zone, solid clay platforms appeared in the earliest, Pre-Cucuteni I phase, either forming the whole of the floor or as a partial platform, often interpreted as a sleeping platform (Marinescu-Bîlcu 1973). However, the idea of increasing frequency of overall house platforms cannot be supported for later Cucuteni phases, in which we find great variations in their constructional frequencies by site and a general decline in platform usage in the Cucuteni B phase. In addition to houses with thick clay floors (e.g. Maidanetskoe; see Fig. 5.5), many Tripillia houses had stamped earth floors overlaid by a thin clay coat and were equipped with ovens, hearths and altars. The platform floor materialises a strong future-orientation in the conception of time, since they are robust, long-lasting constructions which are virtually indestructible. This means that families can forge a close relationship with a particular place and a specific architectural focus over decades rather than years.

Much external and internal house decoration has survived, whether on clay house models or as finds during excavations. House models show that the façades of some special buildings were decorated with monumental stylized depictions of cattle horns made of wood and either painted or carved. There are examples of cornices made of clay mixed with chaff. Their surface is decorated with depressions most probably made by the hands of the builders. The clay wall plaster was covered

with white and/or red painted geometric ornaments consisting of lines and triangles, as seen on house models and pottery (Видейко 2004, p. 326–328). Sometimes the decoration emphasised constructional elements such as roof beams and especially doors and windows, which were encircled by incised or painted lines and images of triangles. There are some fragments of stucco with concave decorations, some of which is filled with cord impressions similar to the impressed decoration on Cucuteni C pottery. As seen from the clay house models, parts of the decorative elements were made of wood. The early existence of well-developed wood-carving is suggested by the incised decoration on vessels from the first and second phase of the Pre-Cucuteni culture, as well as the large number of tools such as polished stone chisels and flint knives with use-wear showing wood-cutting.

In the buildings, and especially in living areas, most of the floors were covered with a thin layer of plaster painted in red. Repeated painted floor plaster layers show that these floors were renovated from time to time. Many T-C houses have preserved internal features and fittings, including ovens, hearths, fireplaces, clay benches, clay ‘altars’ and small grinding areas framed inside clay boxes. Up to 90% of excavated Tripillia dwellings of whatever size had an oven or a hearth. Such features, which are rather large and complex, are known since Precucuteni-Tripillia A. An example derives from dwelling 2 at the Timkovo settlement (Видейко 2005, p. 28–34, Figs. 1.28–1.32). They are made of the same material as the ‘platforms’—viz., a mixture of clay and chaff, stuccoed and probably decorated. Some parts of the hearths and the altars were made of clay with no temper. In later periods, the interior details became more and more complex. Excavation data indicate varying degrees of preservation of the interior features depending on their maintenance. This is best seen in the hearths, ovens and altars, most of which have three to five coats of clay plaster.

There has been an upsurge of experimental house-building for T-C in the last decade, all using traditional materials and copies of Neolithic polished stone axes and adzes (Cucuteni: Cotiuğă and Cotoi 2004; Poduri: Monah et al. 2003). For the one-storey house built at the site of Cucuteni, a total of 500 person-hours was invested in the use of 15t of clay, 4380l of water and 1t of straw, gathered from a cultivated area of 1ha, as well as large quantities of *Phragmites* (reeds) for roofing. The result was a 7×4 m house with a wall height of 1.8m and a wall thickness of 30–35cm. The house was deliberately destroyed in a spectacular conflagration lasting six hours. A similar experiment was conducted at Poduri, where 1.5m³ of timber was found to be insufficient for a full-size house. The result was a 4.5×2.5 m house with a wooden platform covered by 5–6cm of daub, a wall height of 1.20–1.29m and a total height to a pitched roof of 2m.

In the period 2003–2009, several reconstructions of full-size Tripillia buildings were made at Tripolie, Tal’anki and Legedzhine (Fig. 5.6). Wooden materials and modern tools were used during the construction, since the most important task was the successful reconstruction of the dwellings, especially the two-storied ones. Different types of reconstructions were attempted and all of them proved successful and strong enough. In addition, a two-storied building (7×4 m and up to 6m high) was burnt down at Tal’anki in 2003. The ground floor of the building was a timber-

Fig. 5.6 Life-size reconstruction of Tripillia house, Legedzhine village



framed cabin (12m³ of oak), while the upper floor had a wattle and daub framework. The gaps between the logs of the cabin were also plastered with clay. According to V. Chabaniyk, 20m³ of wood, 3m³ of posts, 16t of clay, 1.5t of chaff and straw and 160 bundles of reeds (for the roof) were used. Five people worked on the construction for four weeks (Чабанюк 2008, p. 213–214). The remains of the burnt house were excavated in 2005–2006 revealing that in certain places the clay plaster became exactly as the plaster found during normal excavations. According to V. Chabaniyk, the experiment has confirmed the existence of Tripillian ‘wattle-and-daub structures’ in this area (Чабанюк 2008, p. 211–217; Fig. 1–5).

Practice

Apart from the small number of light, circular huts of a seasonal nature, the T-C house was usually thought of as a permanent structure built for year-round dwelling on a multi-year, if not decadal, basis. One of the few formal demonstrations of year-round, multi-annual occupation concerns the discovery of pips and stones from fruit trees such as the apricot, the peach and the grape on both Cucuteni and Tripillia sites, with the implication of permanent orchards and vineyards (Monah and Monah 1997; Markyevich 1981). The implication for the inhabitants of T-C houses was a number of repetitive practices based upon long-term sedentism, which gave structure to dwelling. We can conceptualise four kinds of occupants in the T-C house: living residents, guests, ritual occupants and the dead/the ancestors. Each of them had varying relations with the house and with each other. There were variations in household composition according to age and gender principles, as well as the possibility of multi-family occupancy (Пасек 1940, p. 28–29; Колесников 1993, p. 57).

The sense of public vs. private imposed by the architecture of the living house (Wilson 1988) was mitigated by the variety of occupants; thus, to some extent, T-C domestic architecture was the materialisation of privacy and private practices. This

may have worked well in the larger houses, but in the smaller one- or two-roomed houses excessive familiarity between all four types of occupant would have been unavoidable (Woolf 1997). However, each occupant referenced other persons and relationships outside the house, breaking down the public–private dichotomy on a fluid, quotidian basis.

For the living, despite the suspected emphasis on gendered roles in maintenance activities, the day-to-day, routine processes of food preparation, the care of the young, the old and the sick, and inter-personal socialisation—all of these were often invisible because they had no obvious ‘product’ (Picazo 1997). Interestingly, the partial platforms in some Cucuteni houses have been interpreted as places for that most invisible and private of practices—sleeping—often together since the platforms were big enough for two. The location of the sleeping places was next to the heating features, i.e. in the warmest places in the house. Since straw was used as bedding, the sleeping places must not have been too close to the fire for safety reasons. The floor of the upper storey was probably warm enough to sleep on. The use of some kind of plank-beds or elevated platforms was also possible.

The most obviously materialised aspect of caring practices concerned food storage, preparation, cooking and consumption—all of which can be routinely documented inside the home and whose presence or absence would have been related to specific rituals of construction (Бурдо 2003; Круц 2003). Many houses had large storage jars near the hearth or oven, with small grinding areas delimited by clay borders. The majority of the one-roomed houses at the Cucuteni A site of Truşeşti had annexes with several storage jars for cereal storage or grinding stones for making flour. Conversely, at Tripillia B sites such as Kolomyishchina II and Vesely Kut, many of the small, separate buildings have been termed ‘granaries’ because of their concentration of large storage jars and little else (Tsvek 2005). However, such an interpretation may not be entirely correct, since the vessels may have been deposited for ritual rather than for storage purposes. In addition, simple estimates suggest that the size of the rooms was not big enough to store all necessary provisions for a whole family.

There was a widespread tendency to cluster activities around the oven, hearth or fireplace in both Cucuteni and Tripillia houses, perhaps a sign of communal food preparation, cooking and eating (Souvatzi 2008). However, in many Cucuteni A and AB houses, for example at Drăguşeni and Traian, two hearths were placed in a single space, with interpretations of impermanent partitions suggesting one hearth per room. The hypothesis for multi-hearthed houses, interpreted as extended or multiple families accommodated in up to four different rooms (Пасчек 1940, p. 28–29) has recently been revisited (Видейко 2005). It was established that almost 90% of the buildings had only one oven/hearth, while the remainder had two heating features in different rooms that were sometimes separated from each other and which had separate entrances. The consumption of firewood was reduced by the attic construction, the remains of which were found in many Tripillia buildings in different areas. The advantages of insulating the house to keep upper floors warm determined the re-arrangement of the whole living space.

The other aspect of household practices concerned production practices not involving food. There is a clear diachronic development in the scale of production from the early period, where household production of flint tools (Târgu Frumos), pottery (Dumești) and antler tools (Drăgușeni) alongside other domestic practices gradually made way for more specialised workshops, or ‘house-workshops’ to use Tsvek’s (2005) term, created for only one activity. Thus, flint mining sites such as Polivanov Yar III and Pekari II included buildings or special outdoor places with masses of lithic débitage, showing specialised production for exchange. Large buildings where vessels were shaped for firing in kilns outside the settlement have been found at Varvarovka VIII and XV, Zhvanets, Petreny, Koshylivtsy and other places. It is important to note that there is little to distinguish these workshop structures from houses in architectural or visual terms. The late T-C house had diversified beyond its original dwelling function.

Wilson (1988) has demonstrated the importance of hospitality as a response to the division of social space by the building of houses and the exclusion of some people from private places. A common feature of T-C houses was the collection of finely decorated cups, bowls and dishes for individual consumption of food and drink. The discovery of what has been claimed as two animal bones from the same red deer carcass in two adjacent houses at Drăgușeni is seen by Popovici (2010) as evidence for food sharing between households. Such a case is also known from the animal bone assemblage from Maidanetskoe. The occupants of neighbouring buildings could have participated in common ceremonies that may have involved the sharing of pottery vessels (e.g. the fragments of the same clay house models ‘buried’ next to different buildings, see Гусев 1995, p. 221–224). Moreover, fragments of the same figurine were found in pits under the building rubble of two adjacent buildings at Maidanetskoe (Шмаглий and Видейко 2002/2003, p. 75–76). Since neither the house model nor the figurine re-fitted to complete objects, we can assume that they were shared by more than two households.¹

The ritual occupants of T-C houses took many forms, whether anthropomorphic and zoomorphic figurines or anthropomorphic vessels, often making use of house models, model furniture, altars or benches. In some cases, individual figures were attached to the edge of an oven or placed inside a storage jar full of cereal grains. There are cases in Maidanetskoe where complete and fragmented zoomorphic and anthropomorphic figurines, together with sherds and animal bones, were ‘buried’ in pits throughout the life of the house; the pits were found under the house rubble (Шмаглий and Видейко 2002/2003, p. 66–87). Similar numbers of figurines in pits under many houses on different sites suggest the existence of common ritual activities over a wide cultural area (Бурдо 2008, p. 67–72). Occasionally, figurines were placed together in groups of up to 40 per household, suggesting a figurine store for the entire village (Marangou 1996). Another distinctive, if uncommon, feature concerns the fragments of large clay figurines found in Tripillia settlements. The largest statuettes reached up to 50–70cm in height, while the majority stood up to

¹ It is worth noting that the level of erosion was minimal. Houses were found under 0.6–1.2m of relatively undisturbed loess.

30cm high. Judging by the figurines placed inside house models, such objects were located in the oven area or on a bench. It was also suggested that statuettes that had holes in the shoulders or the head may have been fixed in the houses or shrines by wooden dowelling. Remains of monumental sculpture are known also from the site of Cucuteni, where they were interpreted as deriving from a shrine (Lazarovici and Lazarovici 2007, p. 229, 232, 237, Fig. Vd. 88, 101). An individual person's features were occasionally materialised in fired clay figurines, whether as specific medical conditions or different ages, including the old and the young (Monah 1997, Figs. 12, 17/3, 82/2, 116/1, 118/1, 3, 7–8, 128/3, 162/1, 175/1, 2, 176/1, 3, 196/1, 205/2, 223/4). We discuss the meaning of the ritual occupants below.

The fact that these sacred elements were important is witnessed by the clay models showing houses furnished with benches and altars, as well as individually modeled miniature chairs, armchairs, 'thrones' and three- or four-legged stools. It is believed that all these clay models were used during different rituals (Бурдо 2004, p. 346–347). Some of the life-size furniture may have been decorated by carving or painting, as shown from damaged decoration and traces of paint. They are known from the time of the Precucuteni–Tripillia A till the beginning of Tripillia CII.

The final group of occupants—the dead, the spirits or the ancestors—were not as visible as the ritual occupants but played an important household role in the mortuary practices of regional groups virtually devoid of cemeteries. Not all houses contained fragments of human bodies or even human bone fragments but this was a specific feature of house 9 at the Cucuteni A site of Scânteia, where 111 human bones or teeth, representing a minimum of 33 individuals, had been deposited in a burnt house prior to its firing (Bem 2007). This accumulation of people linked house 9 to a wide range of ancestors and living families in the settlement and perhaps beyond.

The remains of dead persons were scarce in comparison with the remains of dead houses. There has been a long debate over the question of the deliberate or accidental burning of T-C houses. In recent times, experimental work has shown that the amount of timber and clay in a house was insufficient to create firing temperatures recorded from burnt or vitrified daub, meaning the deliberate addition of fuel (as in the Cucuteni house-firing experiment: Cotiugă and Cotoi 2004; see Fig. 5.7). The high proportion of burnt houses in most T-C settlements indicates that house burning was a regular practice for the killing of a house—what Tringham (2004) has evocatively termed 'domisthania'. This practice also raises the vital question of the formation of the artefact assemblages inside the burnt houses: were they the product of a 'living' assemblage or had villagers collected material to create a 'dead-house assemblage', much as with the collection of grave goods for the grave?

We can also suggest the presence of several phases of ancestral occupation in Cucuteni–Tripillia houses. The first was when ancestors lived together with the occupants who participated in certain rituals during the lifetime of the building. Those figurines and fragmented animal bones found within and around the house rubble may be related to this phase. The next phase is linked with the rituals of abandonment when the house was filled with pottery, food and tools arranged in a particular

Fig. 5.7 Burning of a Cucuteni house. (Photo: Neamț County Museums)



order; even in the nineteenth and the start of the twentieth century, these finds made some scholars think of ancestor cults (Хвойка 1901). The most important part of this phase was the burning of the houses, which perhaps aimed at the release of the *genius* of the sacrificed objects and the spirits of the ancestors. The third phase concerns rituals focused on already burnt and abandoned houses. These rituals show up as specific traces within the cultural layer and suggest short-lived activities; an example is found at Bernashevka, where an upper layer consisting of numerous bones of wild and domestic animals was identified, most probably the remains of sacrificial food (Бурдо and Видейко 2004, p. 75–76). The elucidation of several phases of rituals associated with burnt houses is an important conclusion that may have wider significance than in the T-C case.

Meaning

In a landscape virtually devoid of other monumental structures, enclosures or cemeteries, the settlement domain is overwhelmingly dominant and, within the settlement domain, the T-C house appears omnipresent, structuring the whole of community life. Wilson (1988) expresses the means by which the T-C house dominates social space: ‘with long-term sedentism, time becomes anchored in space, whether intended to or not; time becomes repetition and recursiveness; hence, through the seasons and other cycles, continuity becomes an explicit feature of domestic life’ (Wilson 1988). The T-C house is repeated again and again, within narrow parameters, each new building indexing past construction and dwelling practices as well as collective agency. Thus, by the early third millennium BC, new T-C houses were recursively indexing many practices which had been in existence for two millennia, creating an inevitability about the form of the same rectangular buildings known for many generations and with whom so many ancestors were closely associated. But there is tension between such ancestral associations with houses and the almost complete absence of the super-imposition of houses, so typical of Balkan tells (Bai-

ley 1996), as if the T-C household was a bounded entity in some way separate from ancestral space as well as from its neighbours.

The Tripillia–Cucuteni groups constructed a geometric order for their living space on two levels—at the settlement level, where the organising principle of concentric layout of streets reached its apogee in the Tripillia mega-sites (Videiko 2007a), and at the level of the individual house, which formed a visual and material diagram of the occupants (Wilson 1988), representing cultural order as opposed to the unruly natural world. This geometric order was constantly reinforced at a third level—that of the object. The designs of many of the decorated pots and figurines embodied all of Keightley's (1987) four principles of compartmentalisation, standardisation, precision and symmetry; the ubiquity of painted pottery in houses made these richly decorated, brightly coloured and shining vessels a central part of the domestic visual domain (Chapman and Gaydarska 2006).

An important aspect of the meanings of houses is highlighted in the relationship between the house, its fixed furnishings and fittings and the moveable objects we have already termed 'ritual occupants'. The former were built in the process of construction of the house and were an integral part of its interior; thus, they could not be moved without the removal of the main construction. The fact that fragments of such elements are found in the cultural layer, and especially in pits under the buildings or next to the buildings, suggests that such removals were performed from time to time, perhaps at times of renovation (Відейко 2004). The many parallels between the excavated house features and the house-models illustrate the principle that the Tripillian material world was designed to index real houses on two levels: the morphological and the symbolic.

Figurines comprised a significant proportion of the moveable objects found in a burnt house assemblage. There remains great divergence of interpretation in the literature, with traditional views relating figurines to the worship of the 'Great Mother' (Monah 1997; Бурдо 2008) and alternative views specifying individuality, dividuality and personhood (Hamilton 1996; Chapman and Gaydarska 2006; Gaydarska et al. 2007). Bailey (2005) has recently urged us to reject earlier, oversimplified ideas of figurines as portraiture in favour of the notions that figurines provoke us to think again about what it means to be human and that bodies are political, social and cultural objects par excellence. However, Bailey disclaims any sense of the meaning of figurines and refuses to apply the contextual approach. A minimal interpretation that figurines are used in domestic ritual in negotiations involving identity, gender and dividual relationships is hardly controversial, together with the recognition that different communities utilised figurines in different practices. The ubiquity of T-C figurines in houses reminded dwellers of the ways that these miniatures represented reality, using the body as an organising metaphor (Kokkinidou and Nikolaidou 1997).

A significant question of meaning for Tripillian houses concerns the interpretation of some structures as 'temples' or 'shrines'. The data for this question are derived, again, from excavated finds (Мовша 1971; Цвек 1993; Lazarovici and Lazarovici 2007, p. 228–234) and house-models (Бурдо 2005, p. 93–113). For the former, the main argument is the presence of remains of a feature interpreted as an

altar (e.g. at Shkarovka, Scânteia, Verești, etc.). In the case of Izvoare and Ariușd, the case was supported by the details of the modelled clay decoration of the interior and the façade, as well as the presence of a monumental figurine (Lazarovici and Lazarovici 2007, p. 237). For the latter, the main argument for the existence of shrines is the clay models of features that lack interior details ('open' models) providing large open ritual spaces and models with roofs ('closed' models) providing covered ritual spaces. Although not all of the above-mentioned cases should be treated equally, the whole complex of finds (models and building remains) is a clear enough indication, for many scholars, of the existence of special shrines within Tripillia settlements. However, much of this ritual material could be interpreted as signs of domestic ritual organized at the level of the individual house, while embedded in a far wider set of ritual practices. The question of a possible hierarchy of shrines within the mega-sites has also been raised (Шмаглий and Видейко 1987; for the large structure at Nebelivka, see the previous section).

Tradition and Change

The origins of T-C domestic architecture may be related to the questions of cultural origins in general. We can distinguish two processes of change: the origins of the Pre-Cucuteni group in eastern Romania and possibly the Dniestr area, and the spread of Cucuteni–Tripillia to the east, as far as the Dniepr valley. Lenneis (2005) has proposed a link between the longhouses of the Linearbandkeramik (see Bickle (Chap. 7); Pyzel (Chap. 8)) and large T-C houses. There are two specific problems with this link. First, we cannot distinguish clear examples of particularly long houses in the intervening Pre-Cucuteni phase; and second, no LBK longhouses have yet been found in the area settled by Cucuteni groups. Moreover, limited excavations on LBK sites east of the Carpathians make it hard to identify longhouses, although they may be detected by linear pits along the sides of otherwise absent structures. Moreover, the traces of elements found in Boian, Tisza and Vinča artifacts in the Pre-Cucuteni–Tripillia A material culture suggest knowledge of many traditions from the Neolithic of central Europe, not only that of the LBK. However, the idea of a general link between the LBK longhouse and the development of timber-framed architecture in the Pre-Cucuteni–Tripillia A period remains a possibility.

The eastward Tripillia expansion brought mixed farming, sedentary living and large, well-appointed houses to the forest steppe zone for the first time. The T-C phenomenon seems an excellent example of Anick Coudart's (1998) observation that, once adopted, the form of domestic architecture resists change very strongly because it is a value system and worldview shared by all residents. The logic here is that the structure of the house could have been used as a metaphor for the life-cycle of humans and social groups, including households, as well as for the social relations linking persons from the same or from different houses together. Thus, although we can identify ceramic 'provinces' at a general and a regional level—the Cucuteni (painted wares) vs. the western Tripillia (painted wares) vs. the eastern

Tripillia (incised wares)—the houses in these major provinces do not show such great differences from each other as are claimed by Tsvek and Rassamakin (2005). It should be mentioned that, from the beginning of Tripillia BI, Cucuteni and Tripillia are not to be viewed as a monolithic phenomenon but rather as a multi-faceted cultural complex that had various regional manifestations (e.g. more than 40 regional-chronological groups for Tripillia alone: Videiko 2007b, p. 27–32).

At the regional level, several archaeologists make claims that the houses in their area of study are different from the houses of other groups, as is for instance the case with the rarity of surface houses in the Bolgrad variant (Dolukhanov 2001) or the Tripillia B houses of the Middle Dnieper (Shumova 2005). However, the claimed differences are rarely clearly articulated. In the works of Tsvek, for example, the differences appeared on the basis of different interpretations of the house remains. Despite the discoveries of two-storied houses in the eastern Tripillian area, Tsvek does not engage in discussion and continues to hold to the old view of platforms representing single burnt floors. In many cases, the presence of ‘local particularities’ may be related to differences in the scale or intensity of archaeological investigations in the different areas.

Careful analysis of primary excavation data indeed shows several regional differences. Explanations vary from the idea that these were often linked to newcomers bringing different building traditions into a newly settled area, to local practices, such as variations in the degree of sedentism or ritual or the size and number of families in a dwelling. Five examples illustrate these explanations:

1. As an example of incoming group traditions, the technology of coating earthen floors with clay is known mostly from west of the Dniestr, while those rare instances of such a building practice in the area between the southern Bug and Dniepr have been related to settlers coming from the west (e.g. Kosenovka). Similarly, a specific feature of house models in the Dniestr valley is the use of vertical pillars supporting the main walls. It is suggested that this tradition emerged in communities using the Vol’no-Ljyblinkaya style of painted pottery, whose antecedents are known to have built their houses with vertically dug-in scaffolding (Videiko 2001, p. 24–26).
2. Differences in family size or space requirements may be invoked to explain the greater frequency of longhouses (viz. longer than 20 m) along the river Dniepr than in other regions, even if the same wattle and daub construction techniques were used. However, an interesting local particularity is the use of clay with no added plant temper.
3. The most visible differences in architecture emerged in the Tripillia CII period, when the traditional wattle and daub house was no longer ubiquitous. The latter were common in the Brinzenskaya and Gordineshtkaya groups, while they were hardly found in the Sofievskaya group. Again, this difference may relate to the different degree of sedentism of these communities—permanent occupations along the rivers Prut and Dniestr and predominantly temporary sites in the eastern regions. However, one cannot exclude bias in investigations as a result

of the larger number of excavated settlements to the west in comparison to the Podneprovie area.

4. Equally, the different distributions of houses with or without thick clay platform floors (Хвойка 1901; Зиньковский 1976; Круц 2003; Бурдо 2003) raises the alternative that such architectural dissimilarities may be a result of varying ritual practices in different Tripillian groups, given the intense ritual practices in houses with such floors.
5. A final example concerns the presence of interesting interior details, such as massive open hearths on clay platforms, benches and crucible altars, in the region between the rivers Bug and Dniepr. It could be said that they are a particular characteristic of the area, despite occasional such finds west of the southern Bug. However, such differences can be related to knowledge of a wider range of smaller archaeological sites from the region between the rivers Bug and Dniepr in comparison to the more intensive investigations of a few mega-sites such as Tal'anki and Maidanetskoe.

Thus, there are good grounds for inferring regional architectural particularities, but there is an ongoing debate about the causes of these variations. What is clear is that the extent of regional differences in ceramic assemblages is far greater than spatial variations in house architecture.

An important chronological aspect of change in architectural traditions concerns the details of house interiors, which underwent a series of changes over the centuries, including increasing compartmentalization according to the occupants' needs. Both one- and two-storied Tripillia houses usually had several rooms, each with a different function. The lack of hearths on the ground floor suggests that it may have been utilized for household production or storage, while the upper floor was used for living. One way that Cucuteni houses gained additional special space was the addition of so-called annexes to the main house, often for storage or stone working practices.

Discussion and Conclusions

Tripillia–Cucuteni houses materialised an entire worldview for their occupants, creating a warm, safe, comfortable, decorated, ritualised and monumental place which could be endlessly reproduced and indeed was, over an estimated 70 successive generations. First built in the middle of the mature farming period in the Balkans, T-C houses went on being constructed long after almost all other Balkan Climax Copper Age communities had become transformed into smaller, more dispersed settlements with less elaborate domestic buildings. In many ways, the T-C house was the enduring symbol of what Monah and Monah (1997) have termed 'the last great Chalcolithic civilization in Europe'. How, then, did the living T-C house contribute to Tripillia–Cucuteni cultural developments?

The most important conditions for dwelling that the T-C house provided were the warmth, safety and comfort to live in the same place for many decades, if not centuries. Tringham and Krstić (1990) have outlined the importance of fully sedentary lifeways for agro-pastoral communities in terms of the potential for long-term cultural identities, accumulation of household goods and stable subsistence practices. While small-scale communities had put down roots in Neolithic Moldavia and Moldova, sedentary lifeways hardly existed east of the Dniepr prior to the Tripillia period. The early T-C house created the conditions for radically different, less mobile lifeways in large parts of the forest steppe zone of eastern Europe. Those T-C communities who mastered the cultivation of the extensive tracts of chernozem soils of great fertility and resilience were able to settle down permanently. Their domestic cereals and animals in turn domesticated the landscape, with their requirements of cleared spaces, paddocks and pastureland (Clement 1999).

However, whatever soil resources the T-C loesslands provided, most of these areas lacked basic raw materials such as flint, rocks suitable for making axes, salt (important exceptions included the rich zone of high-quality flint in the Prut and Dniestr valleys and the rich salt resources of the Carpathian piedmont), as well as prestigious materials such as copper, gold and silver. Thus, wherever sedentism, houses and soils formed a self-structuring linkage, long-term social reproduction in these agriculturally rich sedentary communities depended upon regional and inter-regional exchange networks of considerable logistical complexity. The distribution of T-C metal and ornament hoards is concentrated in the Cucuteni zone, with copper finds scarce in most Tripillia settlements (but see Karbuna: Dergachev 1998).

The T-C house also symbolised a widespread aesthetic principle found from the Neolithic onwards—the creation of monumental geometric order through the construction of essentially rectangular spaces. The cultural importance of geometric order can be seen in T-C painted pottery as well as in many prestige objects, but the monumental scale of T-C houses projected its visual cultural symbolism onto the rolling loess landscapes. Moreover, the process of house construction relied on the cultural transformation of key natural elements of T-C life—clay, water, timber, thatch and pigments. The dominance of clay evokes Stevanović's (1997) conception of the Neolithic as 'the age of clay', but the quantities of timber required for experimental house-building show the importance of long-term woodland management as a further aspect of landscape domestication.

Another key contribution of the T-C house was its potential for variations on its long-term theme of cultural continuity. The rectangular form allowed for different house sizes, as well as additions and extensions, sub-divisions and spatial re-combinations. Thus, architectural responses to social or family changes could be managed within the vernacular tradition. However, the building of exceptional houses (defined as larger than 100 m²) has so far not yielded different 'dead house assemblages' from those of normal-size houses. The surprising scarcity of exceptional houses on excavated Tripillia mega-sites clearly distinguishes the mega-sites from coeval Near Eastern cities. More frequent is the variation in function in rectangular houses, with various separate workshops as well as craft corners well attested in what otherwise are the dwelling houses. Equally, there are houses with concen-

trations of ritual occupants and ancestors, but the visual symbolism of the house broadly equates to that of other structures.

The second, flexible trait of T-C houses is their almost limitless capacity for combination and re-combination into groups of houses, whether two dozen or two thousand. This flexibility implies the existence of households that are partly individual (relatively ‘independent’ of each other) and partly dividual—inextricably linked to neighbouring houses and street-based groupings. In small settlements, the number of potential interactions between houses was not a serious issue but, as settlement sizes increased to over 1,000 structures in Tripillia BII and CI, what Fletcher (1995) termed the ‘communication limit’ would have been breached in the absence of internal settlement divisions or other symbolic devices. The apparent lack of any architectural materialisation of hierarchy in the mega-sites suggests that there may be local community structures organising the logistical provisioning of these huge sites. It is hard to see how T-C households did not play an important role in these community groupings, at the very least through shared ritual practices and also with household leaders forming local ‘councils’ for the resolution of disputes and decision-making.

The identification of ‘shrines’ in what otherwise looked like dwelling houses suggests that public ritual was one of the practices connecting local households. In addition to this possibility, there is strong evidence for shared practices at the household level, with the entire household—residents, visitors, ritual occupants and ancestors—playing their parts in ceremonies. The wide spatial and temporal distribution of similar domestic ritual practices, often involving figurines and house models, suggests that this action was very important for the social integration of community groups in mega-sites and other large sites. The most dramatic practice was the deliberate burning of the T-C house at the end of its use life, which included as one of a sequence of death-of-house rituals the deposition of a ‘dead house assemblage’ of objects in the house before it was set alight. Extreme caution must have been used to ensure the immolation of only one house in a street densely packed with houses.

On the basis of the above, it can be proposed that the T-C house made a major contribution to both the overall cultural development of T-C communities and also the emergence of mega-sites in the fourth millennium BC. In many ways, the stability of the house created the stability of the settlement and its enduring presence over centuries on the loesslands of south-east and eastern Europe.

Acknowledgements The authors would like to thank Daniela Hofmann and Jessica Smyth for their kind invitation to contribute a chapter to this book. We are grateful to Bisserka Gaydar-ska for her translation of Russian texts and for her positively critical comments on earlier drafts. JCC acknowledges the friendly co-operation of Dan Monah and Gheorghe Dumitroaia during his research visits to Piatra Neamţ and Iaşi. JCC is also grateful to the other authors for their warmth and hospitality during successive research visits to Kjiv and for their great co-operation during our joint field season at Nebelivka in 2009 and 2012. The authors are also grateful to the British Academy, the Society of Antiquaries of London, the Institute of Archaeology in Kjiv and Durham University for financial and logistical support for the first field season of the Tripolye mega-sites project at Nebelivka.

Bibliography

- Bailey, D. 1996. The life, time and works of house 59, Tell Ovcharovo, Bulgaria. In *Neolithic houses in northwest Europe and beyond*, eds. T. Darvill and J. Thomas, 143–156. Oxford: Oxbow Books.
- Bailey, D. 2005. *Prehistoric figurines*. London: Routledge.
- Bem, C. 2007. *Traian Dealul Fântânilor. Fenomenul Cucuteni A-B*. București: Muzeul Național de Istorie a României.
- Бурдо, Н.Б. 2003. Сакральний аспект архітектурі трипольських протогородов. In *Трипольская культура в Украине. Поселение-гигант Тальянки*, ed. A. Korvin-Piotrovsky, 18–21. Київ: Корвін-Пресс.
- Бурдо, Н.Б. 2004. Моделі стільців-тронів. In *Енциклопедія Трипільської Цивілізації*, Т./ II, ed. М.Ю. Відейко, 346–347. Київ: Укрполіграфмедіа.
- Бурдо, Н.Б. 2005. Керамические модели построек трипольской культуры. *Матеріали та дослідження з археології Східної України*. Луганськ 4:93–113.
- Бурдо, Н. Б. 2006. Архітектура трипільських племен Середньої Наддніпрянщини. In *Охорона культурної спадщини Київської області. Проблеми, матеріали, дослідження*, eds. X. Morgyn and M. Videiko, 42–62. Київ: Академперіодика.
- Бурдо, Н.Б. 2007. Реконструкція будівель трипільської культури. Методика та концепції. In *Трипільська культура. Пошуки, відкриття, світовий контекст*, eds. S. Kot and M. Videiko, 29–48. Київ: Спадщина.
- Бурдо, Н.Б. 2008. *Сакральний світ Трипільської цивілізації*. Київ: Наш Час.
- Бурдо, Н.Б. and М.Ю. Відейко. 2004. Животноводство трипольської культури в період 5400–2750 гг. до н.э. *Arheologia Bimaris* 3:67–94.
- Чабанюк, В. 2008. Новые экспериментальные данные по проблеме трипольского домостроительства. In *Трипольская культура в Украине. Поселение-гигант Тальянки*, ed. A. Korvin-Piotrovsky, 211–226. Київ: Корвін-Пресс.
- Chapman, J. and B. Gaydarska. 2006. *Parts and wholes. Fragmentation in prehistoric context*. Oxford: Oxbow Books.
- Chapman, J. and M. Videiko. 2011. The Tripillia culture mega-site near Nebelivka: summer 2009 season. *Praehistorica (Prague)* XXIX:79–94.
- Childe, V.G. 1945. Review of ‘Tripi’l’ska kultura’, Akademia Nauk Ukrainian S.S.R., Institut Arkheologiy, Kiev, 1940. *Antiquity* 19:203–206.
- Clement, C.R. 1999. 1942 and the loss of Amazonian crop genetic resources. I. The relation between domestication and human population decline. *Economic Botany* 53:188–202.
- Cotiugă, V. and O. Cotoi. 2004. Parcul arheologic experimental de la Cucuteni. In *Cucuteni-Cetățuie. Monografie arheologică*, eds. M. Petrescu-Dîmbovița and M-C. Văleanu, 337–350. Piatra Neamț: Muzeul de Istorie i Arheologie Piatra Neamț.
- Coudart, A. 1998. *Architecture et société néolithique: l’unité et la variance de la maison danubienne*. Paris: Maison des Sciences de l’Homme.
- Dergachev, V. 1998. *Karbunskii Klad*. Chisinev: Akademiya Nauk Republiki Moldova.
- Dolukhanov, P.M. 2001. Alternative revolutions: hunter-gatherers, farmers and stock-breeders in the northwestern Pontic area. In *Ancient interactions*, eds. C. Renfrew and M. Levine, 13–24. Cambridge: McDonald Institute for Archaeological Research.
- Fletcher, R. 1995. *The limits to settlement growth*. Cambridge: Cambridge University Press.
- Gaydarska, B., J. Chapman, A., Raduntcheva and B. Koleva. 2007. The chaîne opératoire approach to prehistoric figurines: an example from Dolnoslav, Bulgaria. In *Image and Imagination*, eds. C. Renfrew and I. Morley, 171–184. Cambridge: McDonald Institute for Archaeological Research.
- Gimbutas, M. 1982. *The goddesses and gods of Old Europe*. London: Thames & Hudson.
- Гусев, С.О. 1995. *Трипільська культура Середнього Побужжя*. Вінниця: Антекс-УЛТД.

- Hale D., J. Chapman, N. Swann, M. Videiko and R. Villis. 2010. Early urbanism in Europe? Geophysical survey at Nebelivka, Ukraine. In *Recent work in archaeological geophysics*, abstracts booklet of a conference held at the Geological Society, London 15th Dec 2010, 35–36.
- Hamilton, N. 1996. Can we interpret figurines? *Cambridge Archaeological Journal* 6:281–307.
- Keightley, D. 1987. Archaeology and mentality: the making of China. *Representations* 18:91–128.
- Kokkinidou, D. and M. Nikolaidou. 1997. Body imagery in the Aegean Neolithic: ideological implications of anthropomorphic figurines. In *Invisible people and processes. Writing women and children into European archaeology*, eds. J. Moore and E. Scott, 88–112. Leicester: Leicester University Press.
- Колесников, А.Г. 1993 *Трипольское общество Среднего Поднепровья. Опыт социальных реконструкций в археологии*. Киев: Наукова думка
- Круц, В.А. 2003. Трипольские площадки – результат ритуального сожжения домов. In *Трипольская культура в Украине. Поселение-гигант Тальянки*, ed. A. Korvin-Piotrovsky, 74–76. Київ: Корвін-Пресс.
- Кричевський, С.Ю. 1940. Розкопки на Коломийщині і проблема трипільських площадок. Трипільська культура. *АН УРСР. ІА. – К.: Вид-во АН УРСР* 1:279–284.
- Хвойка, В. 1901. Каменный век Среднего Приднепровья. *Труды XI Археологического съезда в Киеве в 1899 году* 1:730–812.
- Lazarovici C.M. and G. Lazarovici. 2007. *Arhitectura Neoliticului și Epopii Cuprului din România*. 2 vols. Iași: Trinitas.
- Lenneis, E. 2005. Traces du Rubané dans l'architecture Cucuteni? In *Cucuteni. 120 years of research – time to sum up*, eds. Gh. Dumitroaia, J. Chapman, O. Weller, C. Preoteasa, R. Munteanu, D. Nicola and D. Monah, 55–64. Piatra Neamț: Neamț County Museums.
- Mantu, C.M. 1998. *Cultura Cucuteni. Evoluție, cronologie, legături*. Piatra Neamț: Muzeul de Istorie Piatra Neamț.
- Marangou, C. 1996. Assembling, displaying and disassembling Neolithic and Eneolithic figurines and models. *Journal of European Archaeology* 4:177–202.
- Marinescu-Bîlcu, S. 1973. *Cultura Pre-cucuteni pe teritoriul României*. București: Academiei Republicii Socialiste România.
- Marinescu-Bîlcu, S. 2000. Dwellings, pits. In *Drăgușeni. A Cucutenian community*, eds. S. Marinescu-Bîlcu and A. Bolomey, 25–48. București: Editura Enciclopedică.
- Markyevich, V.I. 1981. *Pozne-Tripol'skie plemena severnoj Moldavii*. Kishinev: Akademiya Nauk Republiki Moldova.
- Маркевич, В.И. 1990. Домостроительство племен культуры Триполье-Кукутень. Раннеземледельческие поселения-гиганты трипольской культуры на Украине. Тез. докл. I полевого семинара. Тальянки.
- Monah, D. 1997. *Plastică antropomorfă a culturii Cucuteni-Tripolie*. Piatra Neamț: Centrul de Cercetare a culturii Cucuteni.
- Monah, D. and F. Monah. 1997. The last great Chalcolithic civilization of Old Europe. In *Cucuteni. The last great Chalcolithic civilization of Europe*, eds. C-M. Mantu, Gh. Dumitroaia and A. Tsaravopoulos, 15–95. Thessaloniki: Athena Printing House.
- Monah, D., Gh. Dumitroaia, F., Monah, C., Preoteasa, R., Munteanu and D. Nicola. 2003. Poduri – Dealul Ghindaru. In *O Troie în Subcarpații Moldovei*, ed. P. Neamț. Ctin. Matasă.
- Мовша, Т.Г. 1971. Святилища трипольской культуры. *Советская археология* 1:201–205.
- Пасек, Т.С. 1940. *Трипільська культура*. Київ: Видавництво Академії Наук УРСР.
- Picazo, M. 1997. Hearth and the home: the timing of maintenance activities. In *Invisible people and processes: writing women and children into European archaeology*, eds. J. Moore and E. Scott, 59–67. Leicester: Leicester University Press.
- Popovici, D. 2010. Copper Age traditions north of the Danube river. In *The lost world of Old Europe. The Danube valley, 5000–3500 BC.*, eds. D.W. Anthony and J.Y. Chi, 91–111. Princeton: Princeton University Press.
- Шмаглий, Н.М. and М.Ю. Видейко. 1987. Святилища и культовые места на крупных трипольских поселениях. Религиозные представления в первобытном обществе. Тез. докл. конф. Москва.

- Шмаглий, Н.М. and М.Ю. Видейко. 2002/2003. Майданецкое – трипольский протогород. *Stratum plus* 2:44–140.
- Shumova, V. 2005. Dwelling complexes of the Tripolyan settlement of Vasylievka and its place among Middle Dniester settlements. In *Cucuteni. 120 years of research – time to sum up*, eds. Gh. Dumitroaia, J. Chapman, O. Weller, C. Preoteasa, R. Munteanu, D. Nicola and D. Monah, 221–230. Piatra Neamț: Neamț County Museums.
- Souvatzis, S. 2008. *A social archaeology of households in Neolithic Greece. An anthropological approach*. Cambridge: Cambridge University Press.
- Stevanović, M. 1997. The age of clay: the social dynamics of house destruction. *Journal of Anthropological Archaeology* 16:334–395.
- Tringham, R. 2004. Weaving house life and house death into places: a blueprint for a hypermedia narrative. In *Unsettling the Neolithic*, eds. D. Bailey, A. Whittle and V. Cummings, 98–111. Oxford: Oxbow Books.
- Tringham, R. and D. Krstić. 1990. Conclusion: Selevac in the wider context of European prehistory. In *Selevac. A Neolithic village in Yugoslavia*, eds. R. Tringham and D. Krstić, 567–617. UCLA: University of California Press.
- Цвек, О.В. 1993. Релігійні уявлення населення Трипілля. *Археологія* 3:74–90.
- Tsvetk, E.V. 2005. On the problem of distinguishing between manufacturing cults among Tripolyan populations. In *Cucuteni. 120 years of research – time to sum up*, eds. Gh. Dumitroaia, J. Chapman, O. Weller, C. Preoteasa, R. Munteanu, D. Nicola and D. Monah, 145–156. Piatra Neamț: Neamț County Museums.
- Tsvetk, E.V. and Yu.Ya. Rassamakina. 2005. The interactions between the Eastern Tripolye culture and the Pontic steppe zone: some aspects of the problem. In *Cucuteni. 120 years of research – time to sum up*, eds. Gh. Dumitroaia, J. Chapman, O. Weller, C. Preoteasa, R. Munteanu, D. Nicola and D. Monah, 173–192. Piatra Neamț: Neamț County Museums.
- Videiko, M. Yu. 2001. Tripolye and the cultures of central Europe: facts and character of interactions: 4200–2750 BC. *Baltic-Pontic Studies* 9:13–68.
- Відейко, М.Ю. 2004. Споруди трипільської культури. In *Енциклопедія Трипільської Цивілізації*, Том I, ed. М.Ю. Відейко, 315–341. Київ: Укрполіграфмедіа.
- Відейко, М.Ю. 2005. Архітектура трипільської культури VI–III тис. до н. Е. In *Давні поселення України*, eds. М.Ю. Відейко, Р.В. Терпиловський and В.О. Петрашенко, 9–80. Київ: Академперіодика.
- Videiko, M. Yu. 2007a. Contours and contents of the ghost: Trypillia culture proto-cities. *Memoria Antiquitatis* 24:251–276.
- Відейко, М.Ю. 2007б. Етнічні аспекти феномена Трипілля-Кукутень. *Матеріали та дослідження з археології Східної України (Луганськ)* 7:27–32.
- Wilson, P. 1988. *The domestication of the human species*. New Haven: Yale University Press.
- Woolf, G. 1997. At home in the long Iron Age: a dialogue between households and individuals in cultural reproduction. In *Invisible people and processes: writing women and children into European archaeology*, eds. J. Moore and E. Scott, 68–74. Leicester: Leicester University Press.
- Зиньковский, К.В. 1976. О методах изучения домостроительства трипольской культуры. *Материалы по археологии Северного Причерноморья (Одесса)* 8:36–49.