Neolithic clay head from Vassilika (Thermi).

# ORIGINALS AND COPIES:

## FROM IMITATION TO MINIATURIZATION (NEOLITHIC PERIOD TO EARLY BRONZE AGE)

*Christina Marangou*

Recreating physical things in diverse materials or/and in altered sizes involves a transposition process, conceivably entailing divergent functions of the copies, be they *sensu stricto* practical or fictional, or a combination of both. If the real or imaginary functionality of a reproduction diverged from that of its prototype, it is to be debated whether a convenient morphology was intentionally selected and imitated because of its concrete advantages, fortuitously referring to real or fantasy images, or if a theme was depicted because of its symbolic potential, although the resulting morphological characteristics were consecutively exploited for practical purposes, different or not from those of the original, or even if a blend of initial symbolic and utilitarian qualities was pursued in the same recreated and transformed object. Besides different materials used in imitations, the choice of scales, varying from the diminutive to the monumental is obviously significant. Small-size reproductions might sometimes even be further subdivided in clusters of different sizes, possibly implying varying uses and/or symbolic functions and roles of the copies. This essay endeavours to examine the social significance of Neolithic and Early Bronze Age examples, mainly from Northern Greece and the neighbouring areas, in archaeological contexts insinuating human–thing relations.

*Neolithic; Early Bronze Age; imitation; miniaturization; materiality; symbolism*

# INTRODUCTION

Besides tangible remains of real beings and things, a second, mirrored reality on a reduced scale was represented in prehistory. Neolithic and Early Bronze Age three-dimensional *eidolia* (Greek ειδώλιο = small image) depict their human creators, as well as their animate and inanimate environment – animals, structures and artefacts. Most figurines and models from Northern Greece and the neighbouring areas do recall reality, including possibly missing originals, non-identifiable prototypes being an exception. However, if miniatures provide indications of the reconstruction of real life, they may not necessarily constitute its accurate reflection. Images are both the product of imitation and the materialization of thought, referring to the social environment in which they were used, but also to a world beyond the tangible, the realm of symbols.

In fact, during the mental process of transferring a prototype to its image, the original features may have remained unchanged or not: unreal details may have been added, others removed and means of abstraction or exaggeration may have been applied. Imitations are an expression of different transfers and semiotics, while their symbolic values could be connected to the originals and/or to their miniature copies. The copies' (known or guessed) significance, use and function may also have been different from that of the prototypes. Therefore, it is to be debated which parts of the copies are real and which imaginary, which originate in the makers' or users' mental creation, and which in images and concepts of the collective memory of the community. Obviously, many questions remain open.

Copies being artefacts, a concrete functionality is combined with symbolic charge, whereas a prototype's morphology (beyond schematisation and naturalism) may be at least partially connected to practical advantages. Means for gripping and handling or the intended place in the real, human space may influence the appearance of imitations. Besides, the distinction between the *sensu stricto* 'utilitarian' and the 'symbolic' is a modern concept: for example, based on their form, both real-size and miniature vases, boats, or houses constitute 'containers' with a specific volume and content. Similarly, zoomorphic and anthropomorphic vessels or tools that constitute complete figurative representations (not just decorative patterns) are not only vessels or tools, but also autonomous copies of beings. Furthermore, different raw materials may be used and the conversion from an original to its copy following diverse modes of 'transfer' may take place at more than one scale depending on the possible concrete uses, not necessarily depending on the restrictions the raw material may have posed.

In short, recreating physical things in altered sizes and/or in diverse materials involves a transposition process, conceivably entailing various functions of the images, concrete and/or fictional, combined in the same artefact. A brief overview of selected indicative examples allows us to show their possible social significance in contexts insinuating human–thing relations, in the real as well as in the miniature world.

# IMITATED ORIGINALS AND MINIATURIZATION

Significantly, the choice of subjects that are imitated is period-specific. In the Neolithic, humans, animals, various types of buildings, house equipment, fixed, e.g. ovens or 'platforms/benches', or mobile, e.g. furniture or 'screens' (Elster & Nikolaidou, 2003, pp. 432–435 on stools; Marangou, 2019, pp. 132–142 on furniture, pp. 142–149 on ovens), boats of different morphologies, probably referring to various raw materials and types of real watercrafts (Marangou, 1991a; Marangou, 2001a; Marangou, 2001c), more rarely tools (Crnobrnja et al., 2009; Crnobrnja, 2011) and other implements (musical instruments? Todorova et al., 1983; Todorova, 2003), as well as vases (their identification depending on published information concerning 'normal' sized pottery) are imitated in miniature size, most often in clay. Miniature boats, stools and vases appear since the Early Neolithic and houses at least from the Middle Neolithic onwards. Indistinguishable compositions of heterogeneous elements are attested early, such as a seated human bearing an infant, whereas in the Late Neolithic, domestic interiors may be modelled together with household equipment, such as ovens and benches (Gallis, 1985; Renfrew et al., 1986, fig. 8.20a, pl. XL, nos. 1a–d, pl. XCV, no. 4; Elster & Nikolaidou, 2003, pp. 438–439, pls. 11.26, 11.27e; Alram-Stern, 2022), sometimes even with humans (Popudnja: Gusev, 1995; Lazarocivi & Lazarovici, 2010b, figs. 37, 38). Animals are loaded with vases, which could have had a combined practical function, e.g. as lamps (Marangou & Stern, 2009). However, clay houses, ovens, furniture, vases, tools, implements and human figurines were also modelled separately: movement and modification of their layout and/or contents would have been possible, they could have been flexibly placed on particular surface areas, inside a vessel or a building model and even arranged to seemingly interact with each other.

Clay was the preferred material, although stone, as well as bone and shell, particularly for pendants, was occasionally used for miniatures. Towards the end of the Neolithic, clay was sometimes combined with stone (*acrolithic* figurines: Papathanasopoulos, 1996, figs. 216, 217). Not only the represented subjects, but also the contexts, when known, are mainly domestic, even in the case of watercraft models. Funerary contexts are rare and are attested in particular in the case of bone, stone or shell examples (see below).

In contrast to the Neolithic, in the Early Bronze Age miniature vessels, structures, buildings, artefacts and anthropomorphic or zoomorphic figurines are not combined. Rare exceptions are known. There is a preference for either human or animal figurines. Very few miniatures of furniture

are known. They occur permanently combined with anthropomorphic figurines, such as marble compositions of humans sitting on seats, sometimes holding an object (e.g. a musical instrument). Possibly, the occupation or specialisation of the depicted person was intended to be emphasized (Marangou, 1992, p. 170). While in the Final Neolithic stone is combined with clay to create anthropomorphic *acrolithic* figurines, and figurines from stone as well as from bone are also attested at the same time, in the Early Bronze Age, besides some clay examples, stone and bone are the preferred materials in the manufacture of anthropomorphic figurines. Their making required specialised craftsmanship (see below). At the same time, the number of miniature vases increases, particularly in the Northeastern Aegean, where they outnumber other miniature categories (Marangou, 1994). They more often imitate vessel types associated with individual consumption than types connected with storage, transport and, in general, collective use. The total number of the latter collective use subcategories approximately equals the number of miniatures of types for individual use (Marangou, 1992, p. 168; Marangou, 1994). Miniature stone or clay tools (clay ones being relatively rare in the Neolithic) are now well represented (Marangou, 1991b; Marangou, 1992, p. 170). At this stage, a newly introduced raw material, namely metal, was used as well for tools, manufactured by specialists. Anthropomorphic figurines as well as micrographic vases and tools may have had funerary associations in selected tombs (see below).

The interior space of houses and buildings does not seem to have been of interest in the Early Bronze Age, since house models seem to have been exceptional. They might have rather served as clay vessels in the shape of houses (e.g. Sampson & Fotiadi 2008, p. 221, fig. 22.6). Ships rather than boats are represented in miniature in the Early Bronze Age: developed composite dugouts, i.e. long, asymmetrical rowing vessels, such as on engraved two-dimensional representations from the Cyclades (Doumas, 1965; Basch, 1987, p. 80), as well as models from the Acropolis of Athens (Basch, 2017, fig. 7.1), Crete (ibid., p. 85), and Thermi in Lesbos (Marangou 1996b) are attested. Their originals would have been sea-worthy. Simpler vessels are very rare in this period and may have served other purposes (e.g. Troy: Marangou, 2001c). In fact, the Final Neolithic rock art of Strophilas on the island of Andros (Televantou, 2018) may be more indicative of the asymmetrically shaped, developed dugouts of the Early Bronze Age, than of the Neolithic watercraft types. Most Neolithic models seem to correspond to originals mainly used in inland waters. The Early Bronze Age miniatures not only reflect the degree of technical expertise and specialisation, but also the general interest in sea voyages.

# SCALES AND CONCRETE USES: MATERIALITY

In miniaturization, the copy's size is not only related to the prototype's dimensions, but also depends on the reduction scale. Reproductions may sometimes even be subdivided in clusters of size, implying varying concrete uses and roles of the copies: there are miniaturized miniatures ('micro-miniatures': Marangou, 1992, p. 185; Marangou, 2019, p. 172), which do not necessarily show evidence of having been used as pendants. In the Neolithic, small anthropomorphic figurines could have been intended to be put inside a house model or a vase: together with larger examples, they possibly depicted younger individuals (Gallis, 1985; Gallis, 2022; Alram-Stern, 2022). In any case, they may coexist with figurines of 'standard' miniature size (Fig. 1a) (e.g. in Prodromos, Dikili Tash and Dhimitra: Marangou, 1997b; Marangou, 2000; Marangou, 2013; Marangou, 2019). Zoomorphic figurines, mainly referring to domestic animals (Toufexis, 2003) may also come in different sizes (Fig. 1b), and diverse reduction scales may be attested for a specific set of micrographic vessels (Fig. 2a–b). At the same time, the sizes of miniature vases for individual or collective use (Fig. 2c) may not vary significantly, despite the different dimensions of their originals (Marangou, 2019, p. 174, note 516).



**Fig. 1a. Late Neolithic clay female figurines of different sizes from Dikili Tash.**

Fig. 1b. Late Neolithic clay animal figurines of different sizes from Dikili Tash.



Fig. 2. Late Neolithic clay micrographic vases of Dikili Tash. a–b: Various dimensions of miniatures of the same original; c: Closed type miniatures with dimensions comparable to those of vessel types for individual use.

In the Neolithic, the approximate maximum dimensions for clay miniatures range between 6 and 12 cm, 12 and 20 cm, and 2 and 6 cm for humans, but also up to almost 1 m and even more. Animal figurines reach maximum dimensions of 10–20 cm and 4–6 cm, yet much larger ones are also attested. Micrographic vessels generally measure 3–8 cm and 1–3 cm. Micrographic furniture shows maximum dimensions of 5–10 cm and 3–4 cm. Houses measure from 10 to 50 cm, and boats from 6 to 25 cm (Marangou, 2013). In some cases, so-called 'half-seated' anthropomorphic figurines are equipped with proportionate chairs (Todorova et al., 1983, p. 91).



**Fig. 3. Large, clay head from Vassilika (surface find) (front and side view).**

Furthermore, large anthropomorphic – but not only – busts have been found inside real-life buildings, while some rare fragmentary heads, some with hybrid features (Marangou & Grammenos, 2005; Marangou, 2010) are attested as chance finds. Such fragmentary three-dimensional terracotta heads may have originally belonged to large, even almost life-size statues (Fig. 3) (see also Galović, 1959; Marinescu-Bîlcu, 1981). At Opovo, human or animal (bovine?) clay heads would have been fixed on a stand (Tringham et al., 1985), and large figures of pigs were found at Achilleio and Anza (Chapman, 1981; Gimbutas, 1976; Gimbutas, 1984; Gimbutas, 1989; see also the fragment from Dhimitra: Marangou, 1997b, p. 238, pl. 70a–b). This could also be the case for some fragments of relatively large terracotta legs or heads (e.g. from Ftelia in Mykonos: Sampson & Mastrogiannopoulou, 2017, figs. 4.8–4.10; from the Late Neolithic Sarakinos cave: Sampson & Mastrogiannopoulou, 2018, pp. 264–265), unless they would have belonged to anthropomorphic vessels.

Non-autonomous, large, anthropomorphic, zoomorphic or hybrid figures from clay could also be connected to architectural elements (e.g. to interior walls or on roofs), or be integral parts of domestic structures, such as ovens. Besides real *bucrania*, possibly integrating additional elements

**Fig. 4. Clay micrographic 'screen' with relief and incised decoration from Late Neolithic Dhimitra.**

made of clay, clay animal heads with bovine horns are also attested (Kormadin: Jovanović & Glisić, 1960; Dikili Tash: Treuil & Darcque, 1998), in some cases decorating the rooftop of houses (Petrovic, 1990; Toufexis, 2003, fig. 29.3). Anthropomorphic relief decoration is known in 'special' buildings ('temples': Lazarovici & Lazarovici, 2010a; Lazarovici & Lazarovici, 2010b; in Dolnoslav: Raduncheva, 1991; Promachon-Topolnica: Koukouli-Chrysanthaki et al., 2007). On some models of buildings, such representations are replicated, for instance cylindrical anthropomorphic elements on the roof, or bucrania reliefs above the entrance or on inner walls have been evidenced (Lazarovici & Lazarovici, 2010b; Marijanović, 2015). Such figurative decorations could indicate the special status of a unique (?), imposing (possibly common) building.

It has been suggested that statuettes with perforated shoulders or head may have been attached to walls with wooden dowels (Burdo et al., 2013, p. 105). On the other hand, real buildings may also have contained decorated moveable elements, as is suggested by miniatures, such as the so-called 'altar models' (Gimbutas, 1989, p. 72, fig. 112 from Ovčarovo) and possibly the Dhimitra micrographic 'screen' decorated with a *bucranium* in relief (Fig. 4) (Marangou, 1996a; Marangou, 1997b, p. 251), including moveable screens/partitions from non-preserved, possibly organic material (Marangou, 2020, p. 39). As can be guessed not only from their varying dimensions, but also from

**Fig. 5a. Late Neolithic clay open house model from Sitagroi.**

other features, the practical use of Neolithic closed and open building models must have been different, regardless of whether they were exact copies. The 'open' house models, in particular in the Late Neolithic, such as those from Thessaly and Eastern Macedonia, have maximum dimension of c. 20 cm (Fig. 5a) (Gallis, 1985; Renfrew et al., 1986, fig. 8.20a, pl. XL no. 1, pl. XCV no. 4; Toufexis, 1996, p. 329, no. 266; Toufexis, 2022; Elster & Nikolaidou, 2003, pp. 438–439; Trenner, 2010, p. 135, no. 11, p. 153; Alram-Stern, 2022). They feature a floor surrounded by very low walls and are unroofed, with the interior visible. The focus is obviously on the interior layout of the house and the domestic equipment, i.e. oven and 'platform', and sometimes also on the occupants – in some cases moveable (Plateia Magoula Zarkou: Gallis, 1985; Gallis, 2022; Alram-Stern, 2022), in others fixed (Popudnia: Gusev, 1995). In the case of Plateia Magoula Zarkou it has been suggested that the anthropomorphic figurines of different sizes and types inside the house model may have represented a family of three generations (Gallis, 1985; Gallis, 2022; Alram-Stern, 2022), or an extended family of the same household, including people connected to them by their activities (Alram-Stern, 2022, p. 480). The ensembles could also represent practices with an

**Fig. 5b. Late Neolithic clay miniature house roof from Dhimitra.**

entire 'household' involving residents, visitors and ritual participants (as well as ancestors according to Burdo et al., 2013, p. 113). It should be noted that the two four-legged anthropomorphic figurines included in the house model, both considered as male, do not show any obvious sex characteristics and therefore possibly contradict the interpretation of a family featuring a man and a woman as parents. Combinations of female and apparently asexual figurines, with at least one of them smaller than the majority, have also been found in smaller or larger sets, on a platform or inside vases (Marangou, 2009) (see below). Therefore, the Plateia Magoula Zarkou ensemble might reflect a comparable situation with larger and smaller females and/or asexuals, in the restricted space of an open house model.

Although there is evidence of autonomous, small roofs from Late Neolithic contexts (Fig. 5b) (initial maximum dimension up to 10–12 cm, e.g. at Dhimitra: Marangou, 1996a, fig. 5; cf. Trenner, 2010, p. 174, no. 96; see also Marangou, 1992, pl. 3, nos. 9–10; Raczky & Anders, 1999), they do not seem to correspond to the known open house models, which are usually larger and have low walls, so that a roof could not be placed onto them. A 'transitional type' of two-piece house model has been proposed by P. Raczky and A. Anders (1999): independent removable roofs would presumably have covered the house models, though allowed occasional access to the interior. However, no such complete example is known. The independent terracotta roofs size corresponds to a subcategory of the small, closed, roofed house

model (usually up to 10–12 cm in size), mainly attributed to the Middle Neolithic in Thessaly and central Greece (Theocharis, 2000, pp. 180–181; Marangou, 1992, p. 442, pl. 3, nos. 9–10; Gallis, 1996, p. 64; Toufexis, 2022). Access to the interior of these roofed, closed models might have been difficult or even impossible in some cases, even if there are holes in the roof, such as an *opaion*, possibly with a corresponding opening in the floor (Skafida, 1996, p. 327, nos. 262–263; proposed reconstruction in Trenner, 2010, p. 178, pl. IIb), or in the walls (windows/doors?) (Toufexis, 1996, p. 328, nos. 264–265; Toufexis, 2022; Trenner, 2010, p. 164, no. 76). It has been suggested that some of the small models could represent granaries (Toufexis, 1996; Burdo et al., 2013, p. 103). Furthermore, in cases of similar shapes, it may be difficult to clearly distinguish an oven from a house model (Marangou, 2019, p. 148, with further references).

There are also large building models focussing on their exterior, sometimes without floors, and even 'two-storey' ones (Gallis, 1996, p. 64, fig. 17; MN: Toufexis, 1996, p. 328, no. 264; Toufexis, 2022; Burdo et al., 2013, p. 99, fig. 5.4; Hodroyianni-Metoki, 2017, p. 27, fig. 2). The maximum dimension of the floorless models reaches 40–50 cm. It has been suggested (by Trenner, 2010, p. 153 no. 42, p. 258 no. 62) for the Late or Final Neolithic models from Kodjadermen and Cascioarele (Popov, 1918, p. 134, fig. 136; Dumitrescu, 1968), which include 3 or 4 roofs and openings in the walls, as well as generally for models with more than one roof and a common infrastructure, that they would not represent houses, but rather a whole settlement (Gheorghiu, 2009, pp. 115–116; Trenner, 2010, p. 158, no. 62, p. 165, no. 80). Interestingly, concrete, specific use of such large-scale models is attested. The Sultana model (Gumelnita) has seventeen openings of 4.5 to 5 cm in diameter in the walls and the roof. Eleven golden objects and limestone beads were found among its fragments, which appear to have originally been kept inside the model (Hansen et al., 2012, pp. 93–94, figs. 4–5). A combined, both practical and symbolic use must be assumed, in which the miniature building would have covered, perhaps also 'protected' valuable objects. A similar combined purpose may be suggested for a large anthropomorphic vase from Vidra, found close to anthropomorphic and animal figurines and a gold ornament, thought to have been 'worn' by the vase (Rosetti, 1938; see also Marangou, 1996a, with further references).

Neolithic boat models are attested from inland wetland sites (Fig. 6) (Marangou, 1991a; Marangou, 2001a; Marangou, 2001c), apparently representing different types of watercrafts and providing us with valuable information on technological progress, everyday activities and movement on water (see Höckmann, 1996), but also implying the prehistoric natural environment. Although generally preserved incompletely, they seem to have had an original maximum dimension of 6–25/28 cm in length (in most cases 10–25 cm), a width of 2.5–14 cm and a depth/height of 2–7.2 cm, with a length/width ratio of 2:3.4 or even 2:5.8. The real vessels would have been

**Fig. 6. Neolithic clay miniature of watercraft from Tsangli (Thessaly).**

symmetrical or asymmetrical, with an ellipsoidal or almost quadrangular section, with oval or trapezoidal edges, sometimes horizontally perforated, with straight or upwards tapered sides (Fig. 6) (Marangou, 1991a; Marangou, 2001a; Marangou, 2001c; on an experimental, double-ended, paddled papyrus boat see Tzalas, 1995). Although the size of watercraft models is comparable to that of open house models, until now, they have been found empty of other miniature objects.

In the Early Bronze Age, zoomorphic figurines are mostly made of clay, small-sized and standing stably. In contrast, anthropomorphic figurines measure from a few centimetres to almost monumental sizes (Marangou, 1997a); they are usually found isolated. Bone (Marangou 1997a) and stone (Thermi I–II: Marangou, 1997a; Filaniotou, 2019) are often used, raw materials which impose size restrictions. However, a similar morphology of flat and unstably standing figures was apparently aimed at, not only of stone (Thermi I–II), but even of clay (Thermi III–V) (Figs. 7a–b) (Marangou, 1992; Marangou, 1997a). At the same time, sherd figurines occur as well. The typically required focus on the frontal view ('frontality') is also evidenced on the back side of bone figurines, which is usually unworked (Fig. 8). It has also been suggested that natural stones with distinct shapes, which in some cases may have undergone some slight reworking, could constitute 'pebble figurines' (Filaniotou, 2019, pp. 147–148).

It is difficult to distinguish between a (large) stone figurine and a stela: both are characterised by their frontality, large size and relative instability (Marangou, 1997a; Marangou, 2013). *Stelae* being hardly worked on the reverse, they would have been looked at from one direction, similarly to small stone or bone examples, which could possibly be suspended. Originally, stelae or figures could have been leant against a wall or stuck into the ground, the figures also deposited in Cycladic tombs. Their bulkiness and the fact that they were mostly found in isolation shows that they were very probably not designed to be 'active', i.e. did not need to move in

Fig. 7a–b. a: Early Bronze Age clay anthropomorphic head and torso of fragmentary figurine from Thermi (Lesbos); b: Early Bronze Age clay anthropomorphic figurine body (head missing) from Thermi (Lesbos) (front and side view).



Fig. 8. Early Bronze Age bone anthropomorphic figurines/spatulae from Poliochni (front and back view).

space or 'interact' with other figurative representations.

Long, rowed ship models of the Early Bronze Age show proportions of c. 1:12 width/length (Fig. 9) (Thermi: Marangou, 1996b). Clay and metal ship models are frequently attested in Crete and the Cyclades, where they were mainly found in funerary and rarely in domestic contexts (Wedde, 2000, pp. 307–308, figs. 101–108). Ships are also represented in two dimensions on stone engravings ('sanctuary' of Korphi t'Aroniou: Doumas, 1965) and as linear, mostly incised representations on several clay 'frying pans' and other pottery sherds, mainly from Cycladic burials (Wedde, 2000, pp. 313–315, figs. 401–422).

A detailed study by L. Basch based on the comparison between the Neolithic Tsangli model (Fig. 5) (Marangou, 1991a), a Final Neolithic (?) (Basch, 2017, figs. 7.3–7.6) and an Early Bronze Age (?) (Basch, 2017, fig. 7.1) model from the Acropolis of Athens, as well as the Early Bronze Age Cycladic types may show the transition from simpler Neolithic watercrafts to more complex Early Bronze Age vessels. Whereas the earlier watercrafts seem to have been mainly used for inland (exceptionally maritime, see below) navigation, the later examples would have required specialised shipbuilders and maritime navigators.

In the Early Bronze Age, micrographic tools were much more common, particularly the ones made of metal, yet it is difficult to distinguish small dimensioned operational metal tools from 'miniature' ones which did not serve their original purpose. Very small tools may have been used for fine work (Marangou, 1991b; Marangou, 2001b). The artefacts considered 'miniatures' by their discoverers are much smaller than ordinary metal tools belonging to the same or a similar type. Compared to the originals, they are produced in a size ratio of 2:3 to 2:5 (Marangou, 1991b).



Fig. 9. Early Bronze Age clay ship model from Thermi (Lesbos).

# MAKERS AND MANUFAC-TURE

Besides the diversity in size, differences in production processes, a variety of manufacturers, both experts and apprentices, must be assumed in the Neolithic. Some clay miniatures had been modelled and fired with skill, even richly decorated by connoisseurs, while others, sometimes – not always – of smaller size, had been made in a clumsy manner, apparently by non-experts. Poorly made, unsuccessfully executed examples of standard types and well-modelled pieces of workmanship, carefully decorated with complex patterns, possibly imposed by 'rules', are attested on the same site (Dikili Tash: Marangou, 2019, pp. 92, 122, 141, 173). Relatively large anthropomorphic figurines bore incisions (Fig. 10a) (Marangou, 1997b, p. 234; Marangou, 2019, p. 91), which served as auxiliary markings for the application of plastic details, such as arms. Whereas larger ones may also be poorly fired, smaller ones could be meticulously decorated either by an expert (Marangou, 2019, p. 92, pl. 81, no. M 1219) or by an inexperienced maker (Fig. 10b) (Marangou, 2019, p. 92, pl. 78, nos. M 196, M 219, pl. F): independently of their size, some figures are made clumsily, others rather expertly. Indeed, it did not necessarily have to be the very small figurines that were made by novices.



**Fig. 10a. Late Neolithic clay female figurine with incisions-guides for the application of arms, from Dhimitra (front and side view).**

**Fig. 10b. Late Neolithic clay decorated figurines from Dikili Tash, showing an expert (left) and a 'novice' (right) maker.**

As already mentioned, small, undecorated anthropomorphic figurines were found together with larger, decorated ones and miniature house equipment inside vases or house models. Such ensembles could not have been toys made by children (see Moses, 2015, contesting the interpretation of Cata-höyük figurines as toys). This hypothesis seems also highly improbable in the exceptional case of the very poorly made micrographic vases found burnt in incineration tombs of adults (Soufli: Gallis, 1982). Rather, they may have been especially made for instant use in the funerary context.

In Late Neolithic Dikili Tash, among animal figurines of two different types and sizes, the larger, two-headed, heavy ones are roughly made of porous clay containing impurities, even pebbles, while the smaller ones are made of finer clay, show more details and are better fired (as in Fig. 1b). There is however one small example of an unfinished or failed figurine (Marangou, 2019, p. 122).

**Fig. 11. Early Bronze Age roughly-made clay micrographic vases from Poliochni.**

Learning craft skills can begin early in life, by formal or informal instruction, by observation and imitation, guided by more experienced makers (Sofaer, 2015). Fingerprints of a child up to 10 years of age were found on two micrographic vases and a zoomorphic figurine of the Vinča culture: the well-polished zoomorphic body bearing fingerprints of a child on its backbone suggests that both an adult and a child, an expert and a novice, had worked on the same miniature (Balj, 2017). Rather than just child's play, domestic apprenticeship seems a probable interpretation. However, connoisseurs and apprentices seem to have worked in few Neolithic houses.

There is no conclusive evidence of varying degrees of skill in Early Bronze Age bone figurines, although 'child work' is attested on clay miniature vases (Fig. 11) (Marangou, 1994). With regard to stone artefacts, several Cycladic figurines, including an unfinished one, were found in a Skarkos building. They were associated with residues of marble-processing waste and various tools and pigments, indicating a specific space of specialized manufacture (Marthari, 2017). However, the specialised manufacturers of the figurines did not necessarily have to correspond to the individuals who 'used' them: at Troy, a sherd figurine was found in a stone carver's workshop and a stone one in a deer antler workshop, while at Poliochni (Green Period) a bone figurine was found together with several stone axes (Marangou, 1997a; Marangou, 2001b; Marangou, 2013). Working stone and bone required specialised technological knowledge, which may be evidenced in particular by the miniature metal tools (Marangou, 1991b). The discovery of such micrographic metal tools in a few children's tombs opens interesting interpretative directions (Marangou, 1991b) (see below).

# COPIES IN THE WORLD
# OF THE ORIGINALS:
# SYMBOLISM

Precise information of the primary archaeological contexts of the Neolithic figurines and models is not very common. Neolithic clay figurines and models are mostly found in domestic, rather than in funerary contexts, and seem to have been related to daily activities. Micrographic, closed vases, sometimes containing seeds or carbonized wood, thus 'functional' in a sense, as well as anthropomorphic figurines were connected to food preparation and storage, or to whorls and weaving equipment, i.e. to work areas that are considered 'female' (Marangou, 2001b; Marangou, 2020). Decorated micrographic vases and figurines were found with jewellery (Marangou, 2001b). A relationship between anthropomorphic figurines and textiles is also indicated by specific imprints on clay bodies of some *acrolithic* examples (Marangou, 2020, figs. 10a–c). Hence, the miniatures' domestic reference hints at everyday matters, while they could also be associated to ritual/magic concerns. The connection of miniatures to ovens/hearths and places related to fire in houses or yards in general is attested in several cases. This suggests that miniatures were associated either to a family or household, or to a group of households sharing a common oven or heating structure (Marangou, 2001b; Nikolaidou, 2003).

Composite works, such as permanently seated human adults with infants, double-headed animals, or open house models with modelled together platforms, ovens and even anthropomorphic figurines, could represent performative scenes, imaginary or real, which were conceived as an entity and presented in a fixed setting (Marangou, 2018a). There are also syntheses in sets or 'scenes', their distinctly modelled associated movable elements being occasionally grouped together and combined. The well-known 'cult scene' from Ovčarovo IX, consisting of 26 miniature objects, anthropomorphic 'half-seated', mainly female figurines, miniature vessels, furniture and possibly musical instruments and elements of interior screens/partitions (?), was found inside a building, underneath the fragmented remains of a large, unfired clay model of a building, covering an area of c. 50 x 50 cm (Todorova et al., 1983, p. 91; Todorova, 2003, pp. 287, 323, fig. 16A). The latter was probably a building model without a floor of similar dimensions: it could originally have covered all the miniatures (see above).

Groups of figurines, mainly female half-seated ones, together with miniature furniture and other modelled items, placed on a bench, on the floor, by the oven, could have been connected to large house models (e.g.

Ovčarovo), although not necessarily. They could not represent a family, but rather a larger social group (the larger figurines perhaps representing adults, and the smaller, younger individuals), perhaps from a whole settlement (Marangou, 1996a). This also applies to the large group of 46 asexual, or possibly male figurines, found in front of an oven at the site of Stubline. The figurines stand, holding 11 preserved tools (Crnobrja et al., 2009; Crnobrja, 2011). A possible concurrence of oven models and anthropomorphic, half-seated figurines of proportionate dimensions may also be evidenced at Dikili Tash (Marangou, 2019, p. 149). Separately modelled anthropomorphic figures and furniture miniatures were deliberately associated; there is also evidence of the simultaneous manufacture of a seat and an autonomous figurine: at Kodzadermen, a miniature seat's backrest has even left imprints on an anthropomorphic figurine's back when the material was still soft (Popov, 1918, p. 138, fig. 143; Gaul, 1948, p. 134, pl. LXIII, no. 1).

Besides models of furnished and inhabited house interiors or of their elements, occasionally flocks of miniature domestic animals are found (Marangou, 1996a). An exceptional example is known from the site of Ovčarovo, House 10, where in front of a real oven a miniature flock was found in the vicinity of (not inside) a house model (Todorova, 1982; Trenner, 2010, p. 153, no. 43). It is feasible that real animals were kept in residential buildings or in courtyards (Marangou, 1992, p. 224; Marangou, 1996a). Although both main categories of zoomorphic figurines (including a small, perforated one) from Dikili Tash are standing stably (as in Fig. 1b), their obvious difference in size and treatment could imply that they were used differently. Whereas the smaller ones may be movable and/or occur in groups, the larger and heavy ones appear rather isolated and static.

As suggested by models of special structures ('altars': Hansen et al., 2011, p. 94, figs. 73–74), real screens/partitions may have been used in interior spaces. Sets and scenes of miniatures may have been covered by a house model or kept inside a vase, yet the 'concealment' of 'cult scenes' could also have happened by perishable means, including possible textile or wicker hanging fixtures (see Marangou, 2020), in particular if the miniatures' display was only occasional (Marangou, 1996a; see also prints of textiles on real size clay items: Marangou, 2020, with further references). Such real partitions could be decorated with a *bucranium*, as is for instance indicated by the clay miniature 'screen' from Dhimitra (Fig. 4).

Surprisingly, boat models were also found close to an oven, same as figurines and micrographic vases (Marangou, 1996b; 2001a, with further references). This means that a domestic environment may constitute the context even of micrographic watercrafts. It is therefore possible that miniatures did not necessarily or were not supposed to depict their prototypes in real domestic interiors, but that they could also have rather constituted their symbolic representations connected to the domestic sphere (Marangou, 2018b).

At the end of their life cycle, the miniatures seem to have been broken since only separate fragments are usually found (see Chapman, 2000 on fragmentation, and Biehl, 2003 on 'ritual destruction'). However, in the Late Neolithic Sarakinos cave, a large concentration of figurines was deposited in an area near the entrance, while at the same time numerous other figurines were found on the different floors, together with complete deer antlers, suggesting ritualized depositional behaviour (Sampson & Mastrogiannopoulou, 2018). Interestingly, in the Late Neolithic Lion's Cave (Attica), clay figurines were found grouped together, while stone specimens seem to have been intentionally placed in isolation under stone constructions of activity areas. Both categories were associated with other artefacts (Karali et al. 2018, p. 280).

Miniatures rarely occur in funerary contexts, though examples made of valuable materials (gold) have been found in rich burials containing 'precious' goods (Varna cemetery: Fol & Lichardus, 1988). On the other hand, used miniature bowls or 'feeding bottles' were included in some children's and women's (mothers?) tombs (Marangou, 1992, p. 229; Marangou, 2001b), and poorly made miniature vases were found in adult tombs (see above).

It seems as if in the domestic interiors of the Neolithic, presumably symbolic objects and everyday (female) activities were tightly linked, in both the tangible and the imaginary sphere (Marangou, 2001b; Marangou, 2013). The role of (special?) women in the ritual domain may have been important (Marangou, 2020). However, miniatures are not found in every house and hence might not have constituted an inherent element of every household or social group (Marangou, 1996a).

The general characteristic of Early Bronze Age miniatures consists of diverse contexts and the absence of interrelations. Different concrete uses of iconographic categories seem probable: humans, animals, vases and tools do not occur as combined ensembles, but rather they are found individually, in some cases also in small groups of the same theme category. In fact, when (rarely) attested on the same site, anthropomorphic and zoomorphic figurines are not found in the same house, at least never in the same room (Marangou, 1997a). Clay zoomorphic figurines, or micrographic closed vases, sometimes containing seeds, and exceptionally anthropomorphic figurines are found in contexts related to food storage, mainly in Southern Greece (Marangou, 2001b). Their deliberate separation also manifests in the fact that zoomorphic figurines are found in *bothroi* filled with common household waste, organic residues, tools, while anthropomorphic figurines are found in *bothroi* containing jewellery and pigments, ochre and azurite (Marangou, 1997a). The latter correlation can also be observed in Early Cycladic tombs.

Anthropomorphic figurines are found mostly isolated. They are found in few houses, only exceptionally may they occur in groups or related to ovens (Marangou, 1997a; on Skarkos see Marthari, 2017). More often, they

are found in open areas of settlements (Marthari, 2017), as well as in streets, in particular outside houses containing figurines (Thermi: Marangou, 1997a). They are also associated with funerary or ritual contexts. In fact, anthropomorphic figurines are found, both whole and fragmented, in some Cycladic graves that do not appear to be associated with figurine manufacturers. This corresponds to the fact that figurines of different raw materials are attested in spaces of manufacturers working on other materials, as mentioned earlier. Ritual deposition of marble figurines, all deliberately broken, has been proposed by D. E. Wilson (2017). The relevant specimens were found as foundation deposits of houses, in addition to their discovery as offerings in burial or sanctuary contexts. Ritual treatment of anthropomorphic figurines is also attested from finds in walls or under house floors in the Northeastern Aegean (Hüryilmaz, 1999).

In contrast to large Neolithic figures related to houses/buildings, either at the entrance, or fixed on walls or placed near ovens, Early Bronze Age anthropomorphic *stelae* are found embedded in settlement enclosures or fortifications, sometimes even near the entrance (Thermi, Troy: Marangou, 2001b, with further references), including in secondary use (Skala Soteros: Koukouli-Chrysanthaki, 1987, p. 391). These contexts suggest the objects' involvement in collective rituals, including as foundation offerings. Large figures and *stelae* usually refer to open, non-built, public spaces, crossroads and streets (Troy, Thermi: Marangou, 1997a). Stone slabs with cavities on paved roads (Poliochni: Marangou, 2001b) might indicate collective game or rituals. Unlike the Neolithic figurines which were designed to be viewed from all sides, Early Bronze Age anthropomorphic figurines – flat, plank-like, standard size ones or larger examples similar to *stelae* – do not stand stably. In particular large examples, appropriate for open public spaces, were leaned against a wall, embedded in it, or anchored into the ground. They could be seen from a distance by passers-by or assembled groups and could have functioned as signals of a specific location or area. *Baetyls* which may have represented animate beings are rarely found. They were originally placed in open, uncovered spaces, such as for instance in a yard at Eutresis (Marangou, 1992, p. 233 with references) or in a paved court at Poliochni (Cultraro, 1997).

As mentioned above, already in the Final Neolithic, symbolic objects and representations are often found near the entrance or on the enclosures of coastal settlements, perhaps for the 'protection' of the inhabitants or to 'demonstrate power': the two-dimensional ship representations at Strophilas are mainly carved in public areas, such as in front of the settlement enclosure, most of them placed opposite of the entrance, perhaps marking the access to the settlement, while numerous other ships are depicted on the exterior façade of the enclosure (Televantou, 2018, p. 391). In Final Neolithic funerary contexts, such as at Kefalas (Kea: Coleman, 1977), the anthropomorphic figurines are attested in a central area of both sectors of

the cemetery, where they were placed outside of graves, including near the earliest grave. The cemetery is located at the base of the cape, and the area in which the figurines were placed is near the access to the settlement of Kefalas. As has also been suggested by C. Broodbank (2000), anthropomorphic figurines are found in domestic contexts of the Late Neolithic, whereas in the Final Neolithic they seem to have been preferably placed in cemeteries, outside the graves. In the Early Bronze Age, anthropomorphic figurines were deposited inside the graves.

In the Early Bronze Age, models of the artificial environment do not contradict the context of figurines: they are rarely associated with the domestic sphere, but rather indicate their involvement in exterior public activities and collective, as well as funerary practices. Certain thematic categories are also connected to specialized tasks and possibly clusters of population (Marangou, 2018b). Two-dimensional representations of seacrafts may also have funerary associations, such as the incised examples on the Syros 'frying-pans' (Broodbank, 1989; Wedde, 2000), but are also attested in outdoor, public spaces (Doumas, 1965, p. 53, fig. 7, pl. 37a). An Early Bronze Age ship model (Fig. 9) has been found in a street in Thermi, in front of most important houses which contained figurines (Marangou, 1996b). Yet, ship models were also found in Cycladic tombs. Such funerary associations with seaworthy vessels might imply the dead's related specialized activity or a similar connection.

In the Early Bronze Age, micrographic stone and clay axes are numerous, while miniature metal tools also occur on sites with evidence of metallurgical activities. Micrographic vases, in particular vases related to liquids (jugs, bowls and 'feeding bottles'), are not only attested in houses, but also in public outdoor spaces and in areas around wells (Marangou, 1991b; Marangou, 2001b), as well as in graves of (usually not too young) children. Some miniature 'feeding bottles' have also been found in tombs of women (mothers?), and stone miniature vases containing pigments in adult tombs (Marangou, 2001b, with further references).

Children could have been assigned outdoor tasks, such as herding and tending animals, or helping with water procurement. In select Early Bronze Age tombs of children who had died after the age of first dentition, micrographic clay, open vases and, more rarely, micrographic copper or lead tools were found, in cemeteries where some adults had also received a differentiated treatment in death (Devnja: see references in Marangou, 1991b). While the functionality of these miniature tools cannot be excluded, significantly the children's graves did not contain anthropomorphic figurines, or 'dolls'. On the other hand, sometimes female figurines and whorls had been given to deceased pre-adolescent or adolescent girls, in the Final Neolithic (Gimbutas, 1989, p. 199, fig. 312). Children may have become efficient and productive community members after reaching a certain age, a life stage, having entered or achieved apprenticeship or completed initiation

(including initiation to a craft), without excluding external 'work' activities (Marangou, 1991b; Marangou, 2001b). At least some children can also be associated to symbolic practices.

Therefore, the symbolic charge and concrete use of Early Bronze Age miniatures is different from the Neolithic ones: the choice of the depicted themes, their associations and combinations change. The symbolism and contexts of the miniature objects point to a collective rather than household/family-connection. Furthermore, we observe a shift towards their involvement in communal practices as well as public gatherings in outdoor spaces, but also towards their use in the funerary sphere, as observed in some burials. Finally, the miniatures, in particular in regard to certain thematic categories, imply a connection with specialised activities.

# CONCLUSIONS

The prehistoric miniatures under discussion did not necessarily have the same concrete function, even when referring to the same prototype. Taking into consideration the factors of the miniatures' practical usability vs. unusability, flexible combinability vs. fixed composition, moveability vs. permanently or temporarily fixed placement, they were part of a system. On the one hand, they could form individual entities, or on the other hand change their components and *mise-en-scène.*

Flexible combinations among Neolithic clay miniatures were possible since they were usually stable and more or less proportionate in size. They are normally connected to domestic contexts associated to 'female activities', including in limited spaces called 'functional', such as inside house models or other containers, including exposed on real-life benches, or by an oven or on the floor. House models could have covered both miniature 'scenes' and valuable objects. Rare large building models with more than one roof on top of the same base might also represent clusters of houses, kin groups, or clans. Groups of miniatures were found in a few houses or close to some ovens, including in yards. However, it is unknown if they referred to just one family, or rather to a small group of households, a social group, or special persons from the whole settlement. In any case, domestic apprenticeship and manufacture by some families, households or individuals seems probable. On the other hand, large, immovable figures were fixed on architectural elements in or outside particular, 'special' (common?) buildings.

The 'interacting' (in practical reality) of different Neolithic micrographic categories could only be seen when entering buildings and probably not constantly. Only a few persons might have been aware of the hidden miniatures in storage pits or vessels. Possible 'ritual specialists' would have known the required combination of the mobile and/or fixed miniatures, the

respective narrative scenario as well as its performative re-enactment (Marangou, 2020). Large, immovable figures were sometimes connected to particular closed spaces, to which access was possibly restricted to special individuals or groups. The miniatures and their meanings seem in accordance with everyday concerns, i.e. the household, livestock, subsistence, survival and probably with the transmission of collective beliefs and narratives.

In the Early Bronze Age, bone, stone, metal and clay were used for anthropomorphic figurines. Zoomorphic figurines were mostly manufactured in clay. Miniature vases from clay increased, and micrographic tools, now including metal ones, became much more frequent. Miniature furniture or houses were rather exceptional. Whereas anthropomorphic figurines, mostly of stone, were used in funerary and rarely in domestic-ritual contexts, a turn towards the public sphere and specialization, if not individuality, is suggested. Micrographic human beings do not seem to have interacted with other miniatures. Large anthropomorphic figures or *stelae* as well as ship representations were exposed in open areas. A few closed micrographic vases and zoomorphic figurines were connected to storage. On the other hand, miniature open vases were possibly related to children in open areas. In some cases, they were found together with miniature metal tools in children's graves, probably indicating young individuals of a distinguished social group, or of a gender or specific biological stage, hinting at an acquired special skill, a specialized craft or an expertise.

In conclusion to this overview, the choice of themes and transfer processes was intentional and connected to both practical functions and symbolic meanings – domestic or public, profane, ritual or funerary, related or unrelated to a specific individual, family, group, gender, age or specialization. If miniatures reflect either a Neolithic dwelling filled with household gear and operated by a particular family, some households, a social group, a particular gender, or ritual specialists, or Early Bronze Age public, communal activities of guilds or groups or individuals of special, including ritual, status or expertise, we still have to bear in mind that the words are lost and that the understanding of prehistoric symbols can never be absolutely objective, nor conclusive: narration, ritual, apprenticeship and even play could have resulted in similar miniature representations, referring to a 'looking-glass world'.

# ACKNOWLEDGEMENTS

# BIBLIOGRAPHY

Alram-Stern, E. (2022). Figurines, House Model and Ritual Vessels. In E. Alram-Stern, K. Gallis & G. Toufexis (Eds.), *Platia Magoula Zarkou. The Neolithic Period. Environment, Stratigraphy and Architecture, Chronology, Tools, Figurines and Ornaments* (pp. 453–567). Austrian Academy of Sciences Press. https://doi.org/10.1553/978OEAW90363

Balj, L. (2017). Children's fingerprints on the Vinča culture findings. *Glasnik, Journal of the Serbian Archaeological Society,* 33, 149–173.

Basch, L. (1987). *Le Musée imaginaire de la marine antique.* Institut hellénique pour la préservation de la tradition nautique.

Basch, L. (2017). Two Athenian Ship Models of the Third Millenium B.C. In F. M. Hocker & C. A. Ward (Eds.), *The philosophy of shipbuilding. Conceptual Approaches to the study of wooden ships* (pp. 103–111). Texas A & M University Press.

Biehl, P. F. (2003). *Studien zum Symbolgut des Neolithikums und der Kupferzeit in Südosteuropa.* Dr. Rudolf Habelt GmbH.

Broodbank, C. (1989). The longboat and Society in the Cyclades in the Keros-Syros Culture. *American Journal of Archaeology*, 93, 319–337. https://doi.org/10.2307/505584

Broodbank, C. (2000). *An Island Archaeology of the Early Cyclades.* Cambridge University Press.

Burdo, N., Videiko, M., Chapman, J., & Gaydarska, B. (2013). Houses in the Archaeology of the Tripillia-Cucuteni Groups. In D. Hofmann & J. Smyth (Eds.), *Tracking the Neolihthic House in Europe. Sedentism, Architecture and Practice* (pp. 95–115). Springer. https://doi.org/10.1007/978-1-4614-5289-8_5

Chapman, J. (1981). *The Vinča culture of South-East Europe. Studies in Chronology, Economy and Society.* BAR Publishing.

Chapman, J. (2000). *Fragmentation in Archaeology. People, Places and Broken Objects in the Prehistory of South Eastern Europe.* Routledge.

Coleman, J. E. (1977). *Kephala. A Late Neolithic settlement and cemetery. Keos Vol. 1. American School of Classical Studies* at Athens.

Crnobrnja, A. N. (2011). Arrangement of Vinča culture figurines: a study of social structure and organization. *Documenta Praehistorica,* 38, 131–147. https://doi.org/10.4312/dp.38.11

Crnobrnja, A., Simić, Z., & Janković, M. (2009). Late Vinča culture settlement at Crkvine in Stubline. Household organization and urbanization in the Late Vinča culture period. *Starinar, 49,* 9–25.

Cultraro, M. (1997). *The stone baetyl and the pit: glimpses into a North Aegean Bronze Age ritual* [Abstract conference contribution]. European Association of Archaeologists, Third Annual Meeting, Ravenna, Session I.11B. Abstracts, 111.

Doumas, C. (1965). Κορφή τ' Αρωνιού. *Archaiologikon Deltion,* 20, 41–64.

Dumitrescu, H. (1968). Un modèle de sanctuaire découvert dans la station énéolithique de Cascioarele. *Dacia, N. S.* 12, 381–394.

Elster, E. S., & Nikolaidou, M. (2003). Paralipomena and other plastic forms. In E. S. Elster & C. Renfrew (Eds.), *Prehistoric Sitagroi: Excavations in Northeastern Greece, 1968–1970: Vol. 2. The final report* (pp. 421–442). Cotsen Institute of Archaeology Press at UCLA. https://doi.org/10.2307/j.ctvhhhftq.14

Filaniotou, O. (2019). Early Bronze Age schematic figurines from Thermi on Lesbos. In M. Marthari, C. Renfrew & M. J. Boyd (Eds.), *Beyond the Cyclades. Early Cycladic sculpture in context from mainland Greece, the North and the East Aegean* (pp. 142–151). Oxbow Books. https://doi.org/10.2307/j.ctv138ws9f.24

Fol, A., & Lichardus, J. (Eds.). (1988). *Macht, Herrschaft und Gold. Das Gräberfeld von Varna (Bulgarien) und die Anfänge einer neuen europäischen Zivilisation.* Moderne Galerie des Saarland-Museums.

Gallis, K. (1982). *Καύσεις νεκρών από τη νεολιθική εποχή στη Θεσσαλία.* Ταμείο Αρχαιολογικών πόρων και Απαλλοτριώσεων.

Gallis, K. (1985). A Late Neolithic foundation offering from Thessaly. *Antiquity, 59*(225), 20–24, pls. XIV–XVI. https://doi.org/10.1017/S0003598X00056532

Gallis, K. (1996). Κεντρική και Δυτική Θεσσαλία. In G. A. Papathanasopoulos (Ed.), *Neolithic Culture in Greece* [Exhibition catalogue] (pp. 61–66). Nicholas P. Goulandris Foundation; Museum of Cycladic Art.

Gallis, K. (2022). Introduction: Chronicle of Excavations and Research 1974–1990. In Alram- E. Stern, K. Gallis & G. Toufexis (Eds.), *Platia Magoula Zarkou. The Neolithic Period. Environment, Stratigraphy and Architecture, Chronology, Tools, Figurines and Ornaments* (pp. 19–34). Austrian Academy of Sciences. https://doi.org/10.1553/978OEAW90363

Galović, R. (1959). *Predionica, neolitsko naselje kod Pristina.* Muzej Kosova I Metohije.

Gaul, J. H. (1948). *The Neolithic Period in Bulgaria. Early food producing cultures in Eastern Europe.* Peabody Museum of Harvard University.

Gheorghiu, D. (2009). The symbolic construction and representation of the dwelt space in the Lower Danube Chalcolithic (6th Millenium BC). In F. Djindjian & L. Oosterbeek (Eds.), *Symbolic Spaces in Prehistoric Art. Territories, travels and site locations* (pp. 113–117). Archaeopress; BAR Publishing. https://doi.org/10.30861/9781407305332

Gimbutas, M. (1976). *Neolithic Macedonia, as reflected by excavations at Anza, Southeast Yougoslavia.* Institute of Archaeology, University of California.

Gimbutas, M. (1984). T*he goddesses and Gods of Old Europe 6500–3500 BC. Myths and cult images.* Thames and Hudson.

Gimbutas, M. (1989). *The Language of the Goddess. Unearthing the hidden symbols of western civilization.* Thames and Hudson.

Gusev, S. A. (1995). Hausmodelle der Tripolje-Kultur. *Prähistorische Zeitschrift, 70*(2), 175–189.

Hansen, S., Toderaş, M., Reingruber, A., Nowacki, D., Nørgaard, H., Spânu, D., & Wunderlich, J. (2011). Die kupferzeitliche Siedlung Pietrele an der Unteren Donau. Bericht über die Ausgrabungen und geomorphologischen Untersuchungen im Sommer 2010. *Eurasia Antiqua,* 17, 45–120.

Hansen, S., Toderaş, M., & Wunderlich, J. (2012). Pietrele, Măgura Gorgana: *Eine kupferzeitliche Siedlung an der Unteren Donau. In W. Raeck & D. Steuernagel (Eds.), Das Gebaute und das Gedachte. Siedlungsform, Architektur und Gesellschaft in prähistorischen und antiken Kulturen* (pp. 85–97, pls. 2–10). Dr. Rudolf Habelt GmbH.

Höckmann, O. (1996). Schiffahrt in der Steinzeit. In M. Porumb (Ed.), *Omaggio a Dinu Adameşteanu* (pp. 25–60). Clusium.

Hondroyianni-Metoki, A. (2017). Η ειδωλοπλαστική στην περιοχή Κοζάνης. In Π. Αδάμ-Βελένη, Η. Ζωγράφου, Α. Κουκουβού, Ου. Πάλλη & Ε. Στεφανή (Eds.), Ειδώλιο. ΄Ενας μικρόκοσμος από πηλό (pp. 25–27). Archaeological Museum.

Hüryilmaz, H. (1999). Eine Gruppe früh-bronzezeitlicher Menschfigurinen aus Yenibademli Höyük auf Gökçeada (Imbros). *Studia Troica, 9,* 475–488.

Jovanović, B., & Glisić, J. (1960). Eneolitsko naselje na Kormadinu. *Starinar,* N. S. 11, 113–142.

Karali, L., Mavridis, F., & Lambropoulos, D. (2018). Lion's Cave, Hymettus Mountain, Attica: Figurines, structures and material culture associations. In S. Dietz, F. Mavridis, Ž. Tankosić & T. Takaoğlu (Eds.), *Communities in Transition. The Circum-Aegean Area During the 5th and 4th Millennia BC* (pp. 269–282). Oxbow Books. https://doi.org/10.2307/j.ctvh1dtp5.33

Koukouli-Chrysantaki, H. (1987). Οικισμός της Πρώιμης Εποχής Χαλκού στη Σκάλα Σωτήρος Θάσου. *ΑΕΜΘ, 1,* 391–406.

Koukouli-Chrysanthaki, C., Todorova, H., Aslanis, I., Vajsov, I., & Valla, M. (2007). Promachon-Topolnica. A Greek-Bulgarian Archaeological Project. In H. Todorova, M. Stefanovich & G. Ivanov (Eds.), *The Struma/Strymon River Valley in Prehistory. Proceedings of the International Symposium Strymon Praehistoricus. Kjustendil-Blagoevgrad (Bulgaria) and Serres-Amphipolis (Greece), 27.09.–01.10.2004* (pp. 43–78). Gerda Henkel Stiftung.

Lazarovici, G., & Lazarovici, C.-M. (2010a). Neo-Eneolithic cult constructions in Southeastern Europe: Building techniques and space management – a brief overview. In D. Gheorghiu (Ed.), *Neolithic and Chalcolithic Archaeology in Eurasia: Building Techniques and Spatial Organization* (pp. 119–127). BAR Publishing. https://doi.org/10.30861/9781407305738

Lazarovici, G., & Lazarovici, C.-M. (2010b). 'Sacred house' and her importance for the reconstruction of the architecture, inner arrangements and the spiritual life. *Prehistoric Studies, Budapest,* 2–19.

Marangou, C. (1991a). Maquettes d'embarcations: Les débuts. In R. Laffineur & L. Basch (Eds.), *Thalassa. Thalassa. L'Egée préhistorique et la mer. Actes de la 3ème Rencontre égéenne Internationale de l'Université de Liège, Station de recherches sous-marines et océanographiques (StaReSO), Calvi, Corse (23–25 avril 1990)* (pp. 21–42, pls. II–IX). Université de Liège.

Marangou, C. (1991b). Social differentiation in the Early Bronze Age: Miniature Metal Tools and Child Burials. *Journal of Mediterranean Studies,* 1(2), 211–225.

Marangou, C. (1992). ΕΙΔΩΛΙΑ. *Figurines et miniatures du Néolithique Récent et du Bronze Ancien en Grèce.* BAR Publishing. https://doi.org/10.30861/9780860547297

Marangou, C. (1994). Μικρογραφικά αγγεία της Πολιόχνης. In Συνέδριο Δημάρχων του Αιγαίου Μύρινα, Λήμνος (Eds.), *Λήμνος Φιλτάτη, Πρακτικά του 1ου Συνεδρίου Δημάρχων του Αιγαίου, Μύρινα Λήμνου 1992* (pp. 47–64).

Marangou, C. (1996a). Assembling, Displaying, and Dissembling Neolithic and Eneolithic Figurines and Models. *Journal of European Archaeology,* 4, 177–202. https://doi.org/10.1179/096576696800688169

Marangou, C. (1996b). From Middle Neolithic to Early Bronze Age: consideration of early boat models. In H. Tzalas (Ed.), *Tropis IV. 4th International Symposium on Ship Construction in Antiquity. Athens 1991. Proceedings* (pp. 277–293). Hellenic Institute for the Preservation of Nautical Tradition.

Marangou, C. (1997a). Anthropomorphic and zoomorphic figurines of the Early Bronze Age in the North Aegean. In C. Doumas & V. La Rosa (Eds.), *Poliochni e l'Antica Età des Bronzo nell'Egeo Settentrionale* (pp. 649–665). Scuola Archeologica Italiana di Atene; University of Athens.

Marangou, C. (1997b). Neolithic Micrography: Miniature modelling at Dimitra. In D. Grammenos (Ed.), *Neolithiki Makedonia* (pp. 227–265). Tameio Archaiologikon Poron kai Apallotrioseon.

Marangou, C. (2000). Neolithic figurines from Northern Greece. In S. Hiller & V. Nikolov (Eds.), Karanovo: Vol. 3. *Beiträge zum Neolithikum in Südosteuropa* (pp. 229–244). Phoibos Verlag.

Marangou, C. (2001a). Neolithic watercraft: Evidence from Northern Greek wetlands. In B. A. Purdy (Ed.), *Enduring Records. The Environmental and Cultural Heritage of Wetlands* (pp. 191–205). Oxbow Books.

Marangou, C. (2001b). Sacred or secular places and the ambiguous evidence of prehistoric rituals. In P. F. Biehl, F. Bertemes & H. Meller (Eds.), *The Archaeology of Cult and Religion* (pp. 139–160). Archaeolingua.

Marangou, C. (2001c). Neolithic craft: evidence about boat types and uses. In Y. *Bassiakos*, E. Aloupi & Y. Facorellis (Eds.), *Archaeometry Issues in Greek Prehistory and Antiquity* (pp. 737–751). Hellenic Society of Archaeometry; Society of Messenian Archaeological Studies.

Marangou, C. (2009). Gendered/sexed and sexless beings in prehistory: readings of the invisible gender. In K. Kopaka (Ed.), *Fylo. Engendering prehistoric 'stratigraphies' in the Aegean and the Mediterranean* (pp. 81–95, pls. XI–XIV). Université de Liège, Histoire de l'art et archéologie de la Grèce antique; University of Texas at Austin, Program in Aegean Scripts and Prehistory.

Marangou, C. (2010). Dissentions: Magnitude, Usability and the Oddness of Neolithic Figures. In D. Gheorghiu & A. Cyphers (Eds.), *Anthropomorphic and Zoomorphic Miniature Figures in Eurasia, Africa and Meso-America. Morphology, materiality, technology, function and context* (pp. 17–24). Archaeopress; BAR Publishing. https://doi.org/10.30861/9781407306797

Marangou, C. (2013). Ειδωλοπλαστική (Νεολιθική εποχή-Πρώϊμη Χαλκοκρατία). In Δ. Γραμμένος (Ed.), *Μελέτες για την Προϊστορική Μακεδονία, Προ-ιστορήματα* (pp. 1–39). Makedonika.

Marangou, C. (2018a). Illustrating performance: Realism versus pretence in Neolithic Iconography. In S. Ţurcanu & C.-E. Ursu (Eds.), *Materiality and Identity in Pre- and Protohistoric Europe. Homage to Cornelia-Magda Lazarovici* (pp. 193–215). Karl A. Romstorfer Publishing House.

Marangou, C. (2018b). Beyond and around humans – *eidolia* of others: miniatures from the natural and artificial environment (Neolithic period–Early Bronze Age). In Archaeological Museum of Thessaloniki (Ed.), *Figurines in northern Greece from Prehistory until Roman times. Abstracts. International Scientific Symposium. 11–13.10.2018* [Abstract conference contribution] (pp. 27–28). Archaeological Museum of Thessaloniki. [Paper submitted for publication]

Marangou, C. (2019). Les figurines et les maquettes du Néolithique Moyen au Bronze Récent. In R. Treuil (Ed.), *Dikili Tash. Village préhistorique de Macédoine Orientale. I. Fouilles de Jean Deshayes (1961–1975): Vol. 3* (pp. 57–176, pls. 59–91, F–G). Ecole française d'Athènes. https://doi.org/10.4000/books.efa.5532

Marangou, C. (2020). Neolithic anthropomorphic figurines: clothing, dress and costume. *Revue de l'Archéologie du Vêtement et du Costume, 1,* 27–56.

Marangou, C., & Grammenos, D. (2005). 'Monumentality', functionality, animality: On an unusual prehistoric clay head from central Macedonia, Greece, and its implications. *The Annual of the British School at Athens, 100,* 1–40. https://doi.org/10.1017/S0068245400021134

Marangou, C., & Stern, B. (2009). Neolithic zoomorphic vessels from Eastern Macedonia, Greece: *Issues of Function. Archaeometry, 51*(3), 397–412. https://doi.org/10.1111/j.1475-4754.2008.00405.x

Marijanović, B. (2015). Minijatura iz Smilčića. A miniature from Smilčić. *Archaeologia Adriatica, 9*(1), 21–37. https://doi.org/10.15291/archeo.1181

Marinescu-Bîlcu, S. (1981). *Tîrpesti. From Prehistory to History in Eastern Romania.* BAR Publishing. https://doi.org/10.30861/9780860541257

Marthari, M. (2017). Cycladic figurines in settlements: the case of the major EC II settlement at Skarkos on Ios. In M. Marthari, C. Renfrew, & M. J. Boyd (Eds.), *Early Cycladic Sculpture in Context* (pp. 119–164). Oxbow Books.

Moses, S. K. (2015). From playthings to sacred objects? Household enculturation rituals, figurines, and plastering activities at Neolithic Çatalhöyük, Turkey. In G. Coşkunsu (Ed.), *The Archaeology of Childhood. Interdisciplinary Perspectives on an Archaeological Enigma* (pp. 205–216). State University of New York Press.

Nikolaidou, M. (2003). Miniatures and models. In E. S. Elster & C. Renfrew (Eds.), *Prehistoric Sitagroi: Excavations in Northeast Greece, 1968–1970: Vol. 2.* The Final Report (pp. 431–442). Cotsen Institute of Archaeology Press at UCLA. https://doi.org/10.2307/j.ctvhhhftq.14

Papathanasopoulos, G. A. (Ed.). (1996). *Neolithic Culture in Greece* [Exhibition catalogue]. Nicholas P. Goulandris Foundation; Museum of Cycladic Art.

Petrovic, J. (1990). Researches of Gomolava. In M. Höneisen (Ed.), *Die ersten Bauern. Pfahlbaufunde Europas. Forschungsberichte zur Ausstellung im Schweizerischen Landesmuseum Zürich und zum Erlebnispark: Vol. 2. Einführung, Balkan und angrenzende Regionen der Schweiz* (pp. 99–109). Schweizerisches Landesmuseum Zürich.

Popov, R. (1918). Kodza-Dermenskata Mogyla pri gr. Shumen. *Bulletin de la Société Archéologique Bulgare, 6,* 73–155, pl. IV–VI.

Raczky, P., & Anders, A. (1999). Late Neolithic house and oven models from the Tisza region: Problems of interpretation. *Ősrégészeti Levelek,* 1(1), 63–66.

Raduncheva, A. (1991). Kurzer vorläufiger Bericht über die Ausgrabungen in Dolnoslav. In Lichardus, J. (Ed.), *Die Kupferzeit als historische Epoche. Symposium Saarbrücken und Otzenhausen 6.–13.11.1988: Vol. 1* (pp. 107–110). Dr. Rudolf Habelt GmbH.

Renfrew, C., Gimbutas, M., & Elster, E. S. (Eds.) (1986). *Excavations at Sitagroi. A Prehistoric Village in Northeast Greece: Vol. 1.* Institute of Archaeology, University of California.

Rosetti, D. V. (1938). Steinkupferzeitliche Plastik aus einem Wohnhügel bei Bukarest. *Jahrbuch für prähistorische und ethnographische Kunst, 12,* 29–50.

Sampson, A., & Fotiadi, P. (2008). Early Cycladic II–III Finds from Rivari, Melos. In N. Brodie, J. Doole, G. Gavalas & C. Renfrew (Eds.), *Horizon Ορίζων. A colloquium on the prehistory of the Cyclades* (pp. 217–223). McDonald Institute for Archaeological Research.

Sampson, A., & Mastrogiannopoulou, V. (2017). Figurines from the Late Neolithic settlement of Ftelia, Mykonos. In M. Marthari, C. Renfrew, & M. J. Boyd, *Early Cycladic Sculpture in Context* (pp. 30–38). Oxbow Books.

Sampson, A., & Mastrogiannopoulou, V. (2018). Late Neolithic traditions: evidence from Sarakinos cave. In S. Dietz, F. Mavridis, Ž. Tankosić & T. Takaoğlu (Eds.), *Communities in Transition. The Circum-Aegean Area During the 5th and 4th Millennia BC* (pp. 260–268). Oxbow Books. https://doi.org/10.2307/j.ctvh1dtp5.32

Skafida, E. (1996). Nos. 298–309, 311, 324, 326–327, 336, 338–339. In G. A. Papathanassopoulos (Ed.), *Neolithic Culture in Greece.* Nicholas P. Goulandris Foundation; Museum of Cycladic Art.

Sofaer, J. (2015). Bodies and encounters. Seeing invisible children in archaeology. In G. Coskunsu (Ed.), *The Archaeology of Childhood. Interdisciplinary Perspectives on an Archaeological Enigma* (pp. 73–89). State University of New York Press.

Televantou, C. A. (2018). Strofilas, Andros: New perspectives on the Neolithic Aegean. In S. Dietz, F. Mavridis, Ž. Tankosić & T. Takaoğlu (Eds.), *Communities in Transition. The Circum-Aegean Area During the 5th and 4th Millennia BC* (pp. 389–396). Oxbow Books. https://doi.org/10.2307/j.ctvh1dtp5.47

Theocharis, D. P. (2000). Νεολιθικός πολιτισμός. Σύντομη επισκόπηση της Νεολιθικής στον ελλαδικό χώρο (4th ed.). Μορφωτικό Ίδρυμα Εθνικής Τραπέζης (Original work 1980).

Todorova, H. (1982). *Kupferzeitliche Siedlungen in Nordostbulgarien.* Verlag C. H. Beck.

Todorova, H. (2003). Prehistory of Bulgaria. In D. V. Grammenos (Ed.), *Recent Research in the Prehistory of the Balkans* (pp. 257–328). Archaeological Institute of Northern Greece; Archaeological Receipts Fund.

Todorova, H., Vasilev, V., Ianusevic, Z., Kovaceva, M., & Valev, P. (1983). *Ovčarovo.*Editions de l'Académie Bulgare des Sciences.

Toufexis, G. (1996). Ομοιώματα σπιτιών. In G. A. Papathanasopoulos (Ed.), *Neolithic Culture in Greece* [Exhibition catalogue] (pp. 161–162, 329). Nicholas P. Goulandris Foundation; Museum of Cycladic Art.

Toufexis, G. (2003). Animals in the Neolithic art of Thessaly. In E. Kotjabopoulou, Y. Hamilakis, P. Halstead, C. Gamble, & P. Elefanti (Eds.), *Zooarchaeology in Greece, recent advances* (pp. 263–271). The British School at Athens.

Toufexis, G. (2022). Νεολιθικά ομοιώματα σπιτιών του Διαχρονικού Μουσείου Λάρισας. In N. Merousis, M. Nikolaidou & L. Stefani (Eds.), *Μυρρίνη. Μελέτες Αιγαιακής Προϊστορίας. Τιμητικός τόμος για την Αικατερίνη Παπαευθυμίου-Παπανθίμου* (pp. 199–215). Archaeological Museum of Thessaloniki.

Trenner, J. (2010). *Untersuchungen zu den sogenannten Hausmodellen des Neolithikums und Chalkolithikums in Südosteuropa.* Dr. Rudolf Habelt GmbH.

Treuil, R., & Darcque, P. (1998). Un 'bucrâne' néolithique at Dikili Tash (Macédoine orientale): parallèles et perspecctives d'interprétation. *Bulletin de Correspondance Hellénique, 122*(1), 1–25. https://doi.org/10.3406/bch.1998.7164

Tringham, R., Brukner, B., & Voytek, B. 1985). The Opovo Project: a study of socioeconomic change in the Balkan Neolithic. *Journal of Field Archaeology, 12*(4), 425–444. https://doi.org/10.2307/529968

Tzalas, H. (1995). On the obsidian trail. With a papyrus craft in the Cyclades. In H. Tzalas (Ed.), *Tropis III. 3d International Symposium on Ship Construction in Antiquity Athens 1991. Proceedings* (pp. 441–469). Hellenic Institute for the Preservation of Nautical Tradition.

Wedde, M. (2000). *Towards a Hermeneutics of Aegean Bronze Age Ship Imagery.* Bibliopolis.

Wilson, D. E. (2017). The Cycladic marble figurines from EBII Ayia Irini, Kea: evidence for ritual deposition in domestic contexts. In M. Marthari, C. Renfrew & M. J. Boyd (Eds.), *Early Cycladic Sculpture in Context* (pp. 94–102). Oxbow Books.
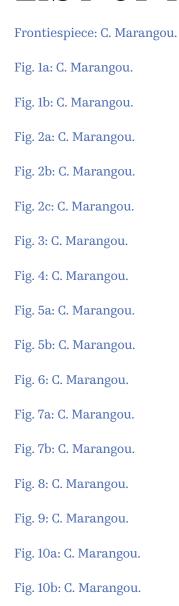
# LIST OF ILLUSTRATIONS

# ABOUT THE AUTHOR

## CHRISTINA MARANGOU

Athens, Greece

iD https://orcid.org/0009-0005-8299-5367

Christina Marangou is an independent researcher based in Athens, Greece. She studied Classics (National and Kapodistrian University of Athens), Social and Cultural Anthropology (École des Hautes Etudes en Sciences Sociales, Paris) as well as Archaeology (University of Paris I, Panthéon-Sorbonne, PhD 1989). She has participated in several excavations and the publication of their results (mainly Neolithic and Bronze Age Greece) and is currently conducting a surface and sub-surface research project (Late Prehistory-Antiquity) on Kastro (island of Lemnos, North Aegean Sea). She has taught prehistoric archaeology at the University of Crete and was a member of the editorial board of the *European Journal of Archaeology* (2004–2010) and the correspondent for Greece for *The European Archaeologist* (2014–2017). Her interests and publications include prehistoric figurines and models, symbolic behaviours, semiotic systems, maritime, nautical, coastal and island archaeology, rock-cut features and rock-art.