

“Neither person nor beast” – dogs in the burial practice of the Iron Gates Mesolithic¹

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ABSTRACT – Research into burial practices of the Iron Gates Mesolithic is here focused upon the dog burials and human burials associated with dog remains in the sites of Vlasac and Lepenski Vir. The analyses of these remains was undertaken in regard to the study of human-animal relationship in the Iron Gates, especially that of humans and canids, the canid domestication process, and the possible role of canids in the Iron Gates Mesolithic belief system. It was argued that canid-human relationship, as it is reflected by material remains both in the settlement and formal disposal areas, was varied and became more ambiguous at the time of contact with the Early Neolithic. Certain aspects of that relationship are firmly incorporated into a broader network of metaphors operating the worldview of the Mesolithic community.

IZVLEČEK – V članku se osredotočamo na raziskave mezolitskih pokopov psov v Železnih vratih in na pokope ljudi, ki so povezani z ostanki psov na najdiščih Vlasac in Lepenski vir. Analize teh ostankov smo opravili z namenom, da bi raziskali razmerje med človekom in živaljo, še posebej razmerje med ljudmi in psi, udomačevanje psa in njihovo morebitno vlogo v verskem sistemu mezolitskih Železnih vrat. Razmerje pes-človek se je, kot kažejo materialni ostanki v naselbini in na določenih odlagališčih, spreminjalo in je postalo bolj negotovo v času stikov z zgodnjim neolitikom. Določeni vidiki tega razmerja so trdno vpeti v širšo mrežo svetovnonazorskih metafor mezolitskih skupnosti.

KEY WORDS – Danube Gorges; Mesolithic burial practices; human-animal relationship; domestication process; belief system

INTRODUCTION

This paper aims to explore the archaeological evidence of the practice of dog burials and placement of dogs or dog skeletal remains in human burials at Iron Gates Mesolithic sites (further: IGM). Interpretation of that evidence is based upon various associations of material remains within their immediate contexts. Possible associations of humans and canids over the course of time and the visibility of some of these in the IGM archaeological record are discussed.

ARCHAEOLOGICAL EVIDENCE OF IGM BURIALS WITH CANIDS OR HUMAN/CANID ASSOCIATIONS

There are only four graves containing canids and/or human-canid associations, and compared to the total number of human burials within formal disposal areas of the IGM, they represent only a small, statistically almost negligible fraction². They were recorded at the sites of Vlasac (three graves) and Lepenski Vir (one grave), situated on the right bank of the Danube in the Upper Gorges (Srejšević 1969; Srejšević

¹ I wish to thank M. Budja for inviting me to cover the topic of dog burials from the Iron Gates Mesolithic perspective – a topic neglected in my previous studies of funerary rites of the area. A characterization of the dog being “neither person nor beast” is borrowed from J. Serpell’s (1995:254) inspiring essay on the ambiguous nature of the dog’s role in various societies.

² The total number of human burials in the IGM is 687, and that of burials associated with dogs represents only 0.58% (Radovanović 1996:161). However, the mentioned total number now differs in regard to results of the re-analysis of skeletal material from the right bank of the Danube (Roksandić in prep. pers. com.) and to recently discovered burials at one of the IGM sites, Schela Cladovei (Bonsall et al. 1997). As no additional burials associated with dogs were reported on these occasions, their number for now remains unchanged.



Fig. 1. Map of the Iron Gates Late Palaeolithic, Mesolithic and Early Neolithic sites (after Radovanović and Voytek 1997).

vić & Letica, 1978; Zoffmann 1980) (Fig. 1). All four canid graves belong to the late phases of the local Mesolithic, dated between the mid-seventh and mid-sixth millennium BC (Radovanović 1996.289). Thus, all four represent IGM burials in settlements which are contemporaneous with the first Early Neolithic settlements in the region (Radovanović 1996a). They are described as follows.

Vlasac (phase II and III)

Burial No. 25 (Fig. 2)

Recorded at the very end of the downstream part of the Vlasac terrace (sq. C/IV), perpendicular to the course of the river, the head towards the rear of the

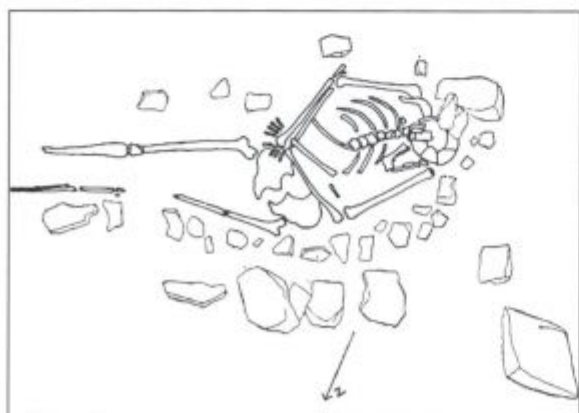


Fig. 2. Burial No. 25, Vlasac (after Srejović and Letica 1978).

site (Radovanović 1996.210). This burial also belongs to the later type of the IGM formal disposal areas and could be related to the Vlasac II settlement phase, although attribution to phase III is a possibility (Srejović and Letica 1978.62; Radovanović 1996.358). According to Srejović and Letica, the deceased was extended on his back, with his right hand placed across his left on the pelvic area, and with his legs extended. A stone-lined construction could be observed along both sides of the body, with a larger stone covering the head. An animal mandible fragment was recorded upon the chest of the deceased.

Skeletal analyses describe the human as a 53–59 year old man, while the animal mandible is that of a dog.

Burial No. 27 (Fig. 3)

Recorded in the upstream, western part of the settlement (sq. b/18) in the location that seems to have been reserved for burials since the initial establishment of a formal disposal area at Vlasac. The burial was placed above an area previously used for a number of interments around house 2 (belonging to the Vlasac I phase and interpreted as a possible structure related to funerary practices). Although that structure collapsed long before the No. 27 interment, it is obvious that this location itself maintained the role of a formal disposal area, for it was used repeatedly over a long time span. According to

Srejšović and Letica (1978.62), burial No. 27 belongs to phase II of the Vlasac settlement although also, possibly, to an early phase III³. According to the results of neutron activation analysis, these skeletal remains are dated later, to 5650 ± 50 BC (Radovanović 1996.367).

By the burial's prevailing attributes, it belongs to a later type of IGM formal disposal area (Radovanović 1996.206, 215–217). Its position in relation to Structure XI above it is similar to the relation of Vlasac I burials (in the central part of the settlement) to the circular stone constructions of Vlasac II erected above them. Therefore, in this case as well, it could be assumed that the grave has some meaningful association with the structure erected above it.

No traces of a burial pit were noted at the time of excavation. Skeletal remains are perpendicular to the course of the river, with the head facing the rear of the site⁴ (Radovanović 1996.206). Srejšović and Letica (1978.62) reported that the human deceased was laying extended on his back with his right arm across his waist and left arm placed 'in the secondary position' below the rib cage and left hand in the pelvic area. The legs were extended, but the right leg was placed across the left one, below the knees. A fragment of animal mandible was recorded just next to the right knee.

According to the skeletal analyses, this human was a 51–57 year old male, while the animal mandible was that of a dog.

Burial No. 81 (Fig. 4)

Unfortunately, the evidence for this burial is deficient. Burial No. 81 was recorded in the rear of the upstream, western part of the Vlasac terrace, in the periphery of the prehistoric settlement (sq. d/15). It is perpendicular to the course of the river, with the feet facing the rear of the site and the head facing the river, although unfortunately, the head and upper parts of the body remained unexcavated. This burial belongs to the later type of IGM formal disposal areas (Radovanović 1996.206) and to the Vlasac II phase in terms of settlement stratigraphy (Srejšović and Letica 1978.62, 64).

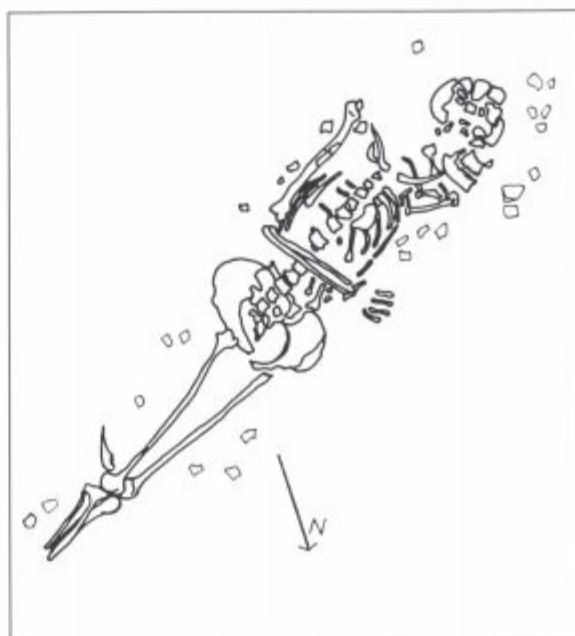


Fig. 3. Burial No. 27, Vlasac (after Srejšović and Letica 1978).

The human's legs are extended, while an animal skeleton, buried parallel to the course of the river with the head pointing downstream, was recorded 'not far from the feet of the deceased'. No traces of a burial pit or stone lining were observed.

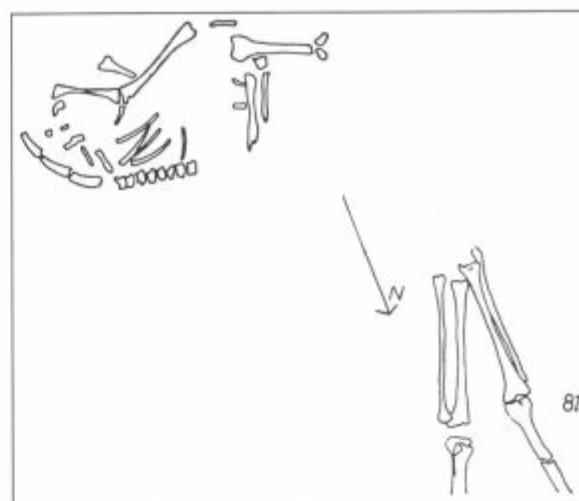


Fig. 4. Burial No. 81, Vlasac (after Srejšović and Letica 1978).

³ It was uncovered below Structure XI dated to Vlasac phase III. Structure XI was erroneously labeled as Structure X in the original publication about Vlasac (compare figs. 25, 39, 40 and 49 in Srejšović & Letica 1978). Unfortunately, I repeated the same error in illustrations for my book (see figs. 3.39 and 3.44b in Radovanović 1996). In my opinion, grave No. 27 already belongs to Vlasac III: the very same location in sq. b/18 contains Structure IV (belonging to Vlasac II) unearthed at 64.78 m above sea level; the noted, more substantial Structure XI (Vlasac III) was found between 65.70 and 65.50 m above sea level, while Burial No. 27 was interred below it at 65.30 m, and thus could be contemporaneous or roughly contemporaneous with Structure XI (see also Radovanović 1996.353–354).

⁴ On grave orientation patterns in the IGM see Radovanović 1996.167.

Skeletal analyses have shown that burial No. 81 belongs to a woman older than 23, while the animal skeleton is that of a dog. According to a field sketch (Fig. 4), the dog's skull and neck are missing. They are also missing in Bökönyi's list of measurable bones related to that skeleton (1978.51-55; *data for sq., d/15, e.l. IX*). One could assume that the skull was not found due to extremely bad preservation conditions, but since the postcranial bones were rather well preserved in this case, and since skull bones - especially the teeth and mandible - are usually better preserved than the rest of the skeleton, it could also be assumed that this dog's head was removed before its burial⁵.

Dog burial was clearly practised in the IGM. Only in this case, it remains uncertain whether this dog was buried in its own right, or in association with the woman in burial No. 81⁶.

Lepenski Vir I (phase 3)⁷

Burial No. 70 (Fig. 5)

The secondary disposal of human bones (femur, ribs and an ulna) and an animal mandible were uncovered 'slightly above the floor' in the rear of the hearth belonging to house 32. House 32 is placed in the rear of the settlement, and according to the site's stratigraphy and its structural properties, it belongs to the latest phase 3 (or Srejović's phases d-e) of Lepenski Vir I. It is placed in Location 14, which was repeatedly used during phase 3 of LV I (*superimposed houses 66, 20, 33, 32, see Radovanović 1996.108-110, fig. 90*). An aniconic 'altar' was placed at the rear of house 32's hearth (Radovanović 1996.

table 3.3). Six 'signs/supporters'⁸ are situated alongside the right border of the hearth, and one is placed left of the rear axis of the hearth, just left of the 'altar' (Srejović & Babović 1983.177).

The human bones belong to a 35-55 year old man, while the animal mandible is that of a dog (Radovanović 1996.185, *after Zoffmann 1983 and field documentation*).

The immediate context of these burials implies that humans and dogs in the IGM had some kind of relationship which was at least not an indifferent one. In three cases, the placement of a dog mandible was recorded within burials of men. In one case, the con-

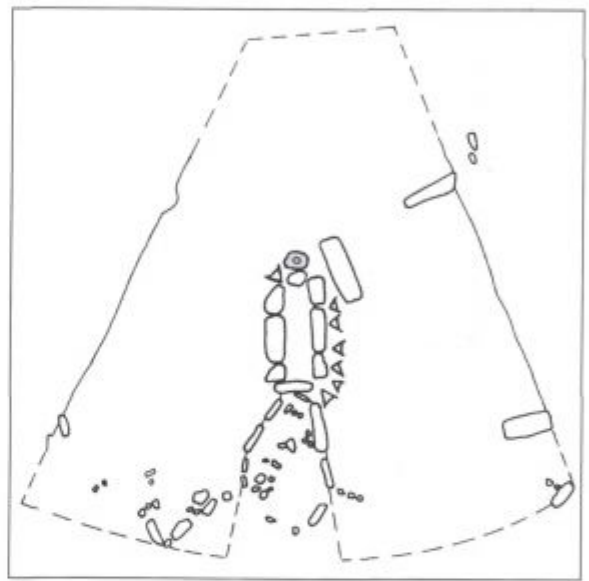


Fig. 5. House 32 containing burial 70, Lepenski Vir (after Srejović and Babović 1983).

- 5 The practice of disarticulation/mutilation of interred bodies was observed in human burials of the later type in the IGM, generally prevailing among women and children. Those with missing skulls, i.e., 'headless', are children (burials 42a, 21, and 7 - all in the same location within the formal disposal area, Radovanović 1996.206-210, 218). Vlasac male burials such as No.3 (fragments of a skull found in the cultural layer; Srejović and Letica, 1978.63), No. 16 (a skull associated with burial 17; Radovanović 1996.216), and No. 43 (a skull without the mandible placed within a grave structure, Srejović and Letica, 1978.63) are not postcranial remains, while Vlasac female burials 71 and 73 are indeed postcranial remains, but with lower jaws recorded and thus excluded from the 'headless' category, as I erroneously listed them in 1996.207-8, 210).
- 6 However, a possible association with the human burial, i.e., within the same grave, seems to be rather improbable in this case. This dog certainly lies close to the woman's feet, but not close enough: if they were really buried together in the same grave, the spatial disposition of their skeletal remains would have been more 'compact' (see figure 4).
- 7 The phases are labeled according to my reinterpretation of the Lepenski Vir site stratigraphy (1996.104-114).
- 8 "Stone plaquettes arranged in the form of the letter A were variously interpreted either as the supporters for the construction above the hearth (Jovanović) or signifiers which stood for the dead members of the family from that house (Srejović). They seem to stand as the construction supporters in some cases only, when they are arranged symmetrically around the hearth, but in many cases they are arranged only at one border of the hearth, or asymmetrically, or in unequal number at both sides, or just one of them, so that Jovanović's assumption remains to be verified. Srejović's assumption that these were signs is more plausible, although it is not clear whether the greater number of these signs in later LV houses really coincided with the introduction of burials below the houses and in the house floors. In regard to their predecessor - the human mandible (Srejović 1969.2-73, 140-141; Radovanović 1996.134) and in view of my comments on the mandibles at the end of this paper, Srejović's assumptions seems to be closer to their actual meaning, in that they were primarily symbolic and not constructive elements."

trasting burial of a 'headless' dog may possibly be associated with a woman buried in a nearby grave.

No traces of other grave goods were recorded in association with any of the noted burials. A formal grave construction was visible in only one case (Vlasac burial No. 25). The relation of burials to dwelling structures was noted in two cases (Vlasac burial 27 and Lepenski Vir burial 70). All human burials contained direct interments except for the Lepenski Vir secondary interment of a man's femur, ribs, and ulna.

Another consideration should be made here in regard to the chronology of these burials. Both Vlasac and Lepenski Vir I burials belong to the late type of formal disposal area in the IGM. Two Vlasac burials with canid remains are characterised by a 'generalised' pattern of man/animal mandible association (*Radovanović in prep.*) and the third one is the noted exception – a 'headless' dog burial. All the mentioned Vlasac burials appear to fall within the second part of the VII millennium BC. Even if they are related to the Vlasac III phase (i.e., closer to the turn of the VII/VI millennium), they still might be earlier than Lepenski Vir burial No. 70 (belonging to the latest horizon of phase 3 in LV I).

However, the spatial and temporal discontinuity of human/canid association in burials does not appear to be that significant if these burials are analysed within a somewhat broader context of human/animal, i.e., human/animal mandible associations. As already noted, the later type of IGM funerary practice is marked by a placement of human or animal skulls and human or animal mandibles⁹ within graves (*Radovanović 1994; 1996; but in greater detail in: Radovanović 1996b.20. Table 9*). All human and animal skulls and animal mandibles are associated with either direct or secondary burials of men, while human mandibles seem to be associated with women and children. Animal skull or mandible remains are always associated with men, and it was therefore assumed that they are somehow related to hunting activities, especially because the men buried with such remains are found to belong to *adultus* and *maturus* age categories (with the exception of one *juvenilis*), i.e., those expected to engage in such activities (*ibid.*). For this reason, the canid skeletal remains associated with men's burials should be considered a part of the more general category of an ani-

mal-man, or more precisely, an animal-hunter relationship. However, I am not inclined to think that all aspects of the human/canid relationship in the IGM should be interpreted in terms of some generalization about hunters and their "faithful dog companions" and I shall try to explain why I think so in the course of this paper.

HUMAN/CANID RELATIONSHIP IN THE IRON GATES

Several interpretations of the human/canid relationship in the IGM are possible. But first I would like to review a number of important general issues in regard to the human/canid relationship, in particular that of the human/wolf. Ecologically, these two species would appear to stand in a relation of rivalry, for both hunt the same repertory of game within a variety of niches (*Fox 1978.25; Sharp 1978.77; Clutton-Brock 1994.25*). In terms of social biology, both are marked by complex patterns of behaviour. They are social hunters, who, apart from hunting, perform all other actions within the social group – the band and pack, respectively – which operates within a marked territory (*Hall 1978; Peters 1978.95–96; Peters 1979.135ff; Peters and Mech 1978.134; Mech 1970.68ff; Clutton-Brock 1995.8*). Both species are aware of each other's presence in the same niche (or territory); both are aware of each other's behaviour and its impact on practically the same staple food resources (*Mech 1970.8*). Human awareness of animals (including that of wolves) and an understanding of their relations may, of course, be well illustrated by various mythical narratives and scientific reports (*Ingold 1994*). An understanding of the wolf's awareness of humans is more difficult. It may, however, be discerned through analyses of the cognitive abilities of wolves and their impact on various aspects of its social behaviour (*Mech 1970; Fox 1975; Klinghammer 1979; Hall and Sharp 1978*) and, especially, of the changes in that behaviour, the most profound of which relate to the so-called domestication process.

The results of these analyses led many scholars to assume that during the Pleistocene of Eurasia, humans and wolves established a relationship which was not exactly a symbiosis, but rather a sort of *alliance* (*Clutton-Brock 1994.25*). It is in this frame-

⁹ Animal bones (unidentified) were uncovered in male graves at early Vlasac (one case) and Lepenski Vir I (two cases), and in children's graves in Lepenski Vir I (two cases). Antler is recorded in male graves of early Vlasac (one case) and later in Lepenski Vir I (four cases), but it is associated with women only in Lepenski Vir II (four cases).

work of *alliance* that I shall further analyse my data, trying not to focus exclusively on the benefits that these two species may have gained in terms of their successful subsistence on a daily survival basis.

The contexts of human/canid relationships in the IGM could be broadly examined as:

- Human and wolf
- Human and tamed wolf
- Human and dog

Human (hunter-gatherers) and wolf

The remains of wolves in the Iron Gates sites that precede the VIII millennium BC are recorded in the Cuina Turcului rock-shelter which was used by mobile hunter-gatherers both in its earlier stratum (XIII millennium BP) and in the later one (XI millennium BP) (Radovanović 1996.321 with further reference). The percentage of wolf bones, compared to other species hunted and brought to the camp, is rather low, but still (statistically) higher than the percentage recorded in later Mesolithic settlements in the Iron Gates (Radovanović 1996.52–55 with references). In Cuina Turcului I, the wolf ranks in third place in the faunal record, although far below the wild boar and beaver. It also holds the third place in stratum II, far below the chamois and aurochs. A question may be posed as to whether these wolves (MNI 2 and 1, respectively) were killed as rivals over prey, or whether they were hunted for food and fur. That these haphazard remains belong to wolves killed for interfering with human hunters in capturing and/or dismembering game is not very probable because wolves would rather wait until human hunters leave the kill spot (Mech 1970.8; Catlin 1989.257). Social-biological and ethnographical observations show that both prey and hunting strategies of the human and wolf may be similar and overlap in the same territory, but as Sharp (1978.77–78) notes, their approach is different, and rivalry is thus more of an indirect than a direct struggle. Wolves generally avoid close contact with humans, especially when it could lead to conflict. They tend to re-

main close to their dens or rendezvous area during the day and are fully active during the night (Zimen and Boitani 1979.63). Mech (1970.6–7, 292 ff) observed that the wolf is aggressive only in three cases: when harassing prey, when meeting strange wolves, and when protecting its offspring. If wounded, the wolf is more inclined to act as if it expects help from man rather than act aggressively in defense.¹⁰

The incidence of wolf remains is also low during the early IGM (VIII–mid VII millennium BC) at Icoana, Vlasac and Padina A (MNI 10 or below it).

However, such remains are not recorded at all in the late IGM (mid VII to VII/VI millennium BC transition). They reappear in the very late Padina B settlement in the first half of the VI millennium and later in the fully Neolithic settlement of Starčevo type at Lepenski Vir. The low frequency of wolf remains in both the Early Mesolithic and Neolithic and their absence in the late Mesolithic is probably just a consequence of sample randomness and lack of identifiable and measurable bones. Be that as it may, there is an apparent disinterest in capturing wolf as prey in both the mobile and sedentary camps and settlements (Bökönyi 1978.51, Clason 1980.150; Radovanović 1996.53–54). If hunting for wolf fur was practised, one would perhaps expect a larger amount of wolf remains on the IGM archaeological sites. However, the animals could have been skinned immediately at the kill site. In this case, no archaeologically visible traces of such an activity would be expected within camps or settlements¹¹. Unfortunately, available data on the state of wolf bones in the IGM sites do not reveal whether they were eaten on such occasions. Bökönyi (1978.50) mentions the complete lack of wolf bones of mature and senile age. However, if only fur was brought into the camp or settlement and the animal was left behind at the kill site, perhaps the wolf was not regarded as an acceptable food. Such an interpretation is even more plausible if we consider certain aspects of human behaviour toward fully domesticated canids, dogs, which are already present in the IGM

10 Reports of wolf attack on humans in modern times seem to imply that in all cases the attacks were by rabid wolves (Mech 1970.289–294). Human perception of the wolf as a villain dates back only to the beginning of animal husbandry, when livestock became an object for wolves to attack (Mech 1970.298). Such a derogatory perception is thus highly improbable for the IGM hunters and gatherers, although it could have been present in its later phases (since the late VII millennium BC) due to contact with Neolithic communities in the neighbourhood. The ethnographic record also appears to confirm that hunter-gatherers did not perceive wolves as 'bloodthirsty aggressors' (Stephenson and Ahgook 1975.288).

11 Ethnographical evidence also suggests that prey (including wolves) could have been given special treatment after death. For example, the native American Cree suspend bones and carcasses of certain animals on trees (in regard to their beliefs on those animals' reincarnation and regeneration), so that such remains are never left scattered around the camp to be gnawed or eaten by dogs or other animals (Brightman 1993.117–119; 132–133).

from the first half of the VII millennium. These dog remains are mostly fragmented, bearing traces of contact with fire, as well as engravings and gnaw marks (*Clason 1980.150 for late Vlasac, Padina A and B and Lepenski Vir I-II*)¹².

The remaining issue deserving attention is that of the possible human perception of wolves at that time. Ethnographical evidence for small-scale societies such as those of mobile or sedentary hunter-gatherers describes human attitude toward wolves primarily as one of respect (*Stephenson and Ahgook 1975. 288; Fox 1978.26; Hall & Sharp 1978.xiii*). Our data do not contradict a possible similar attitude toward wolves in the IGM. Both humans and wolves in the Iron Gates shared the same interest in their main prey, the red deer¹³. As mentioned above, hunting approaches and strategies of both humans and wolves were such that they were not direct competitors, so that direct mutual struggles over game can generally be excluded. Their relationship can be described as either one of mutual tolerance or alliance, as Clutton-Brock put it, or that of the kind described in the ethnographical record. Ethnography also notes that other animals were equally treated with respect and trust (*Brightman 1993.103ff; Ingold 1994.15-16; Serpell and Paul 1994.130-131 with further references*), even if, and often precisely because, they were hunted as prey. Respect for the wolf must therefore derive from the perception of *particular aspects of its behaviour* as valued or desirable in a particular human society¹⁴. This behaviour could be desirable both for an individual (i.e., hunting skill, respect for intragroup hierarchy) and for the group (advantages of social hunting). It is in this respect that the wolf may have attained the role of metaphor, a metaphor that could most straightforwardly express particular ideological norms (*Tilley 1999. 49*). Thus, the process of canid incorporation into human society could have started with the introduction of the wolf as a metaphor, i.e., within the domain of the belief system of a particular society.

A process of 'metaphorical' incorporation of animals into human society can be generally traced throughout the Upper Palaeolithic, back to the appearance of anatomically modern humans (*Mithen 1999.99*). Nor is there any reason to argue against such a metaphorical role for the wolf, bearing in mind the overall social and ideological complexity of the groups belonging to the IGM and illustrated by various aspects of their material culture (*Radovanović 1996 with further references*). The wolf was experienced not only as a part of human society's environment, but also as an integral part of the society's worldview.

My assumptions concerning the human/wolf relationship in the IGM can be summarised as follows:

1. The wolf was probably experienced as a metaphor that could help maintain certain ideological norms related to both individual and group social behaviour of humans. Its metaphorical role was probably expressed through a variety of symbolic representations, none of which, however, are directly observable in the IGM archaeological record to date.
2. Wolves were probably hunted for their fur. They could have been skinned at the kill site, but their other remains were not brought to the settlement, or, if they were, they were not eaten or allowed to be eaten by other animals. Archaeological evidence of wolves in the IGM is generally scanty. However, the scantiness of the record may be evidence in itself of human attitudes toward wolves, as proposed above. Hunter-gatherers could experience and at the same time 'justify' hunting for the wolf's fur within the noted 'metaphorical' framework.
3. Far less probable is that wolves were hunted as competitors over game. They could be skinned for fur on such an occasion, but were still not eaten.

¹² If wolf bones were in a similar condition, I would suppose that the authors of the IGM faunal remains' analyses would have at least mentioned it, for it is clear that gnaw marks on bones did not escape their attention.

¹³ The wolves hunt their preferred prey cooperatively; as a rule, their preferred prey are ungulates larger than themselves (*Sullivan 1978.31*) such as deer, reindeer, moose and musk ox. In the Iron Gates and its hinterlands, large ungulates also captured by humans were bison, elk, wild horse (all three species present until the beginning of the Holocene – probably related to the Epipalaeolithic and very Early Mesolithic), wild ass (only since the Atlantic climatic period – its remains are found in Neolithic settlements), aurochs and red deer (continually over the millennia). In contrast to aurochs, humans in the IGM (*Radovanović 1996. 52-54*) hunted red deer very intensively.

¹⁴ This interpretation is partly in line with Brightman's, i.e., that human foragers' economic, technical and ritual practices related to animals cannot be fully understood if one neglects the consideration that the foragers were experiencing the animals as "social others". In his discussion of the materialist and symbolic dichotomy, Brightman points out that the issue is "not recognition of the necessity of signs but rather the position taken on the relationship between social meanings – in structure, ideation, and practice – and their material coordinates" (*Brightman 1993.1-2, 324*).

Both archaeological and ethnographical records strongly oppose the notion that the IGM community perceived the wolf as a direct rival or an enemy.

This pattern of the human/wolf relationship in the IGM would have remained unchanged from the preceding Late Palaeolithic period. The contexts of human/ tamed wolf and human/ domesticated canid relationships are discussed below.

Human (hunter-gatherers) and tamed wolf

According to both social biological data of wolves and the ethnographical record, there is only one instance which might enable the appearance of a tamed wolf: the capture of a wolf pup at a certain age and its upbringing within a human environment. It is impossible to tame an adult wolf, and if such an attempt is made, it would only take place in 'laboratory' conditions of modern times, as an experiment with the intent, but dubious prospects of success (*Mech 1970.9-11; Serpell and Jagoe 1995.83*). Let us consider when the mobile or sedentary hunter-gatherers could, and why at all they would, capture and keep a wolf pup.

When

Wolves breed once a year in wintertime, when their packs are in a 'concentration' phase; the pups are born in springtime and kept in dens that are dug several weeks before that, during the pack's 'dispersal' phase (*Sharp 1978.66*). According to Mech's data (*1970.143*), the pups do not leave the den at all before they are three weeks old, and abandon it finally when they are two months old, living from then on with the pack in temporary rendezvous sites. By the time the pups are three months old, they are already socialised, having established strong and complex bonds with their parents, litter mates and other members of the pack (*Mech 1970.10*). If this primary socialisation were to take place within a human environment, it would be accomplished according to the same genetically predisposed pattern of behavioural changes during the pup's development. These changes would lead to an establishment of strong bonds with humans, as they would otherwise have led to the establishment of strong bonds with the wolf pack.

This socialisation process allows approximately a 10-week period in the summertime, when it is possible

to capture a wolf pup capable of exhibiting behaviour perceived as 'agreeable' (and today labelled as 'tamed') in respect to its human surroundings¹⁵. The capture's location would be either the den or its immediate vicinity within a fixed period of six weeks (when the pup is between 2 and 8 weeks old), or at the rendezvous area during a four week period (when the pup is between 8 and 12 week old, at the very end of the primary socialisation period).

Once captured, the pup would have to be kept alive and offered the kind of food that it would be capable of consuming. It would be impossible to maintain a pup without milk, which is its critical food resource in the first month of life, while pre-digested food (i.e., regurgitated by the parents or other members of the wolf pack) is critical for one to four month old pups (*Mech 1970.139, 143-144*). The only milk available in a prehistoric hunter-gatherer community would be that of breastfeeding women. Indeed, ethnographic evidence records a large number of examples of infant animals (wolves included) that were suckled at the breast alongside human infants (*Serpel and Paul 1994.130; Serpell 1996.64-65 with further references*).

Pre-digested food needed in the next critical feeding stage could effectively have been replaced with cooked food, which was undoubtedly prepared and consumed at least since Late Upper Palaeolithic times.

However, a tamed wolf pup (a pup with a strong social bond established with its immediate human environment, instead of that with other wolves¹⁶), will maintain an 'agreeable' behaviour only until it reaches adulthood (22 months). After reaching adulthood, the tamed wolf would remain with humans only if the individual was marked by a specific 'agreeable' character. This specific character should dominate its other behavioural traits that could either encourage the young wolf to rejoin the pack, or discourage the humans from tolerating it in their camp (*Clutton-Brock 1995.10*).

Thus, wolves could remain in human camps after reaching adulthood only if they exhibited very specific *individual* behavioural traits. If such 'docile' wolves had an opportunity to breed among themselves, in isolation from wolves outside the human camp (*Coppinger and Schneider 1995.36*), and if they had depended on food given by humans (a

¹⁵ Pups would probably not survive if captured during their neonatal phase, i.e., before they are two weeks old.

¹⁶ The same three month "deadline" for successful primary socialization is also observed for dog pups (*Serpell and Jagoe 1995*).

diet which is not exclusively based on raw meat and bone), then a morphological change in these wolves would have occurred after several generations. Notwithstanding the importance of the change in diet, it should be emphasised that a decisive role in morphological change is played by the factor of breeding isolation from the wolf pack. Needless to say, such isolation is very difficult to envisage in regard to the mobility of Upper Palaeolithic hunter-gatherers and in regard to the tamed wolf's behaviour when it reaches adulthood. Such isolation is more likely to be envisaged in the case of sedentary hunter-gatherer camps, although it would still be very difficult to imagine how that isolation could be maintained (*A. Choyke, pers. comm.*). Taking into account the variability of behaviour among individual wolves (some could be more docile, some more sociable, some more aggressive, etc.), this isolation would have to mean that the particular wolf, marked by a particularly 'tame' character, remained in the human camp after reaching adulthood and raised its offspring among humans. Further breeding of such tame wolves would consequently result in the preservation of 'docile' behavioural traits in their offspring¹⁷, and, after several generations, would also result in morphological change.

It is impossible palaeontologically to differentiate tame and wild wolf remains. In certain Upper Palaeolithic European sites, wolf skeletal remains are sometimes, albeit very rarely, marked by morphological changes such as a smaller skull and teeth crowding (*Bökönyi 1989.25; Clutton-Brock 1995.10; Eriksen 1996.119–120*). It could be assumed then that under very specific conditions noted above, tamed wolves could have been kept in Upper Palaeolithic camps, and that several generations of such wolves could possibly live with humans for some time, the length of that time depending on a particular hunter-gatherer community's settlement logistics and on the degree of interference with wolves outside the camp.

Why

These conditions immediately open the question of why wolf pups would be captured at all and why they would be allowed to participate in "food-sharing activities" in the human camp. I would argue that pups were not captured purposefully, but rather because they were either found abandoned alone in the den or temporarily left in the rendezvous area

when the adult wolves were away from it (*Mech 1970.144–145*), i.e., under conditions when they were most vulnerable. Many pups of different ages could thus occasionally have been brought to human camps, but only those being less than three months old would eventually behave agreeably, i.e., appear to be 'tamed'. The practice of pup capture could be described at least as a random one, whose purpose was not taming, but rather saving vulnerable wolf pups. Tame behaviour would be more a matter of coincidence – the pup saved when less than three months old would socialise with humans in the same way that it would have socialised with members of its own species. The question of why the wolf pup would be brought into human camps was often raised in dealing with explanations of the origin of dogs. A number of scholars accept the 'pet theory' as the explanation of taming and domestication of animals in general (*Serpell 1989; 1996*). This theory is attractive, but, in my opinion, wolf pup adoption by humans could only be explained in terms of the wolf's experience in a particular hunter-gatherer society, as proposed earlier. The interest in pup adoption would arise precisely from the existing alliance between humans and wolves that I tried to explain as initially metaphorical in character. One can assume that it was almost a duty to adopt and raise the abandoned offspring of wolves (whether it was a metaphor for 'the skilled hunter', 'the wolf ancestor' or something else, one can only imagine).

The label 'tame' thus seems rather unsatisfactory in the case of wolves. The tamed wolf's agreeable or friendly behaviour toward the humans who raised it and its possible subsequent friendliness even after rejoining the pack (*Henshaw et al. 1979.339–341*) is a part of the wolf's behaviour as a species, and not the result of purposeful human interference.

Such behaviour on the part of the wolf, after being raised in a human environment and especially after remaining in the human camp during adulthood, would certainly have reinforced its role as a metaphor. It would also have consequently reinforced the status of those individuals who adopted the wolf, or the status of the human group that these individuals belonged to.

It could be assumed that both wild and tame wolves were a part of the same metaphor, and, in this way, firmly incorporated into the particular society's

¹⁷ Coppinger and Schneider (1995.26) explained that behaviour is "inherited not in the sense that it is the result of a gene product, but inherited in a sense that behaviour is a consequence of, and limited by, the animal's morphological, and physiological structures." See also Belyaev's experiment in taming foxes (*ibid.*, p. 37; *Belyaev and Trut 1975*).

worldview and belief system. Tamed wolves could, in addition, be physically incorporated into human society for a limited period of time.

In summary, tamed wolves could be raised in hunter-gatherer camps under the minimum following conditions:

1. If the wolf pups were caught at a particular age.
2. If the wolf pups could be kept alive on the food appropriate for their growth (milk and food which could replace pre-digested food).
3. If the wolves were incorporated within the belief system of human society, being experienced as "social others" and as metaphor.

All these conditions seem to have been met in the IGM, since in spite of the absence of archaeologically observable traits, the practice of wolf taming is implied by palaeontological evidence on domestication of the local wolf population at Vlasac (*Bökönyi 1978,38ff*). But before I return to this question, let us examine the evidence for the human/dog relationship in the IGM.

Human: hunter-gatherers – Canid: dog

Apart from the earlier described finds of four burials at Vlasac and Lepenski Vir, dog remains in the IGM are recorded at Vlasac, Padina, Lepenski Vir and Hajdučka Vodenica (*Radovanović 1996,57 with references*). The earliest dog to date has been found at Vlasac (*Bökönyi 1978,38*); it dates to the first half of the VII millennium BC. The large sample of identifiable dog remains (MNI 160) at Vlasac prompted *Bökönyi (1978,39–43)* to postulate its origin from the 'local wolf subspecies'. The dogs' skulls are described as belonging to a "running dog type...its size ranging between that of a large Mittelschnautzer and a medium Collie" and "entirely different from dog skulls from the Early Neolithic (Körös-Starčevo complex of Southeast Europe of the so-called *palustris* type domesticated in another region (e.g. Near East)". The Vlasac type of dog skulls differ from the *palustris* type in that the brain case more closely resembles that of the wolf, while the position of the teeth resembles that of Mesolithic dogs found in other parts of Europe (Denmark, England and South Germany). This type of skull is also found in Lepenski Vir and Starčevo sites, but together with a number of skulls belonging to the smaller-size and more gracile *palustris* breed which is allegedly of south-

ern origin. Clason's (*1980*) data on Padina dogs do not reveal whether they were of the Vlasac or *palustris* type or both. However, the majority of dog bones at Padina are collected in its latest settlements (VII/VI and first half of the VI millennium BC). Both Vlasac and Padina dog bones were often, as noted above, scorched by fire and marked by traces of carving and gnawing.

It could immediately be noted that the record on dogs and human behaviour towards them in the IGM differs considerably from that toward wolves and/or tamed wolves. The wolf remains are altogether scanty and it was inferred here that the wolf was not hunted either as a rival over game or in order to be consumed as food. If it was caught for fur, it was either skinned and its carcass left on the kill site, or, if carried back to the human camp, it could be skinned and its carcass treated with 'respect', i.e., removed in such a way that it was not exposed to the scavenging of other animals such as dogs and pigs – which were present in IGM settlements since the first half of the VII millennium BC. The wolf's scantiness in the faunal record is here explained by a particular behaviour of humans toward the wolf, which resulted from experiencing it as a metaphor. This interpretation of its metaphorical role in human society may be further reinforced by data which imply that tamed wolves undoubtedly lived alongside humans in the IGM, for if they did not, the dogs found in IGM settlements of the first half of the VII millennium BC would have exhibited morphological traits different from those that point clearly to their local origin. Vlasac dogs have their origin in the local wolf population, which means that a number of generations of tamed wolves must have been bred in the IGM settlements. As I have explained earlier, the taming of wolves, in my opinion, would not have been possible if the wolf was not experienced as a metaphor, if it was not incorporated into the IGM society's ideology.

In all probability, the wolf still maintained its specific metaphorical role at the time when its domesticated cousin became a permanent dweller at IGM settlements.

The human attitude toward dogs, as suggested by the deposition of faunal remains, was quite the opposite of that toward wolves in a few respects. On the one hand, the dog was often eaten and its remains were not removed from the settlement, but left to be scavenged by other animals, including other dogs. Only from the second half of the VII millenni-

um BC could one expect a change in how humans perceived the dog, implying that it also became a metaphor. At this time, the material representation of the metaphor is preserved, it is archaeologically visible – dog remains, restricted to lower jaws only, were found, as described above, in the graves of men. They could be viewed in terms of a 'solid' metaphor (Tilley 1999.264).

The change in human attitudes toward dogs as observed in the IGM could be examined from several angles. Chronologically, this change falls within a period of first contact with Early Neolithic groups, and this contact was confirmed in many other aspects of IGM material culture (Radovanović 1996a. 41–42; Radovanović and Voytek 1997.26) in the second half of the VII millennium BC. In terms of the local evolution of the dog population, the lapse of time between the appearance of the first Vlasac dogs and the appearance of their remains in human burials would be long enough to allow the process of purposeful breeding and upbringing of work (hunting and/or guard) dogs. This process could undoubtedly have been triggered or accelerated by the introduction of the 'Neolithic' *palustris* type of dog into the IGM. The faunal record actually implies such an introduction, since both the local Vlasac and the *palustris* type of dog existed concurrently in both the late IGM as well as in the local Early Neolithic. For now it remains uncertain whether the introduction of the *palustris* dog led to interbreeding with local dogs, or whether the local dog was selectively bred as a work dog even before that. Be that as it may, the appearance of the *palustris* dog in the IGM coincides with the local community's new perception of the dog as a species¹⁸. However, this perception was altogether an ambiguous one. Dogs were eaten, their remains were scattered around the camp, their bones gnawed by other animals. At the same time, dog remains were placed in human graves, and it should be noted once again that it was their mandibles that were chosen to be placed in these exclusively male graves.

I consider the mandible as a metaphor, which was related to some kind of more general category in the IGM belief system (Radovanović *in prep.*). The more general category of mandible had a meaning that was associated with both dogs and men, or as Tilley (1999.50) puts it, 'a frame for its referential extension' was provided. Thus, dog remains in the burials

of men and the scattered remains of dogs in the settlement could have reflected two quite different meanings. The overall perception of dogs by the IGM community seems to have been 'burdened' by at least two contrasting meanings, and that ambiguity of the human perception of dogs has also been recorded in many different places and in different prehistoric and historic periods (Serpell 1995 with further references). Serpell (1995.254) notes that "in symbolic terms, the domestic dog exists precariously in the no-man's-land between the human and non-human worlds. It is an interstitial creature, neither person nor beast, forever oscillating uncomfortably between the high status animal and low status person". The dog (as a species) was physically incorporated into human society and the status of each individual dog depended on how strong its bond was with individual humans. In contrast to the dog, the wolf as a species was metaphorically incorporated into human society, its physical incorporation being possible only in the case of individual 'tame' wolves. Dogs both shared the destiny of the human community that kept them, and the destiny of human individuals to which they were attached. Some were eaten, as in the case of the IGM and a large number of ethnographic examples, although pet dogs (those attached to particular humans) seem to have been killed only for sacrificial purposes (Catlin 1989.224, Serpell 1989.14; 1995.248–250). Ethnographic evidence also confirms that dogs were given ceremonial burials (Serpell 1989.12–13). Archaeological evidence, especially from the Mesolithic, is rather straightforward in this respect (Belfer-Cohen 1995.11; Thorpe 1999.17, 67, 83; Boyd 1995. 21; Larsson 1989.218–220; 1989a.373–374; Tilley 1996.35; Bradley 1998.26–27; Schulting 1998).

CONCLUDING REMARKS

The three men's burials at Vlasac and Lepenski Vir, each containing a dog mandible, obviously do not fall into the category of the dog's 'proper' ceremonial burial, but they are equally important in understanding some aspects of the Mesolithic belief system. The remaining burial described at the beginning of this paper is the Vlasac burial of a decapitated dog, which is the only IGM 'proper' dog burial. As already noted, the unclear record of that burial does not allow a discernment of whether the dog was decapitated and buried in its own right, or

18 It would be interesting to see whether the *palustris* introduction has anything to do with a supposed "expanded exogamous breeding network" of the IGM in the contact period with Early Neolithic communities (Radovanović and Voytek 1997.29).

whether it is related to a woman's burial in its vicinity. The deposition of a headless dog close to the legs of the buried woman at Vlasac closely resembles the placement of a headless dog across the lower legs of a woman in grave VIII at Skateholm II (Larsson 1989a. 373–374; Tilley 1996.35).

In his comment on southern Scandinavian dog burials, Tilley (1996.65) argued that “the dog, as the only domesticated animal living and eating with humanity, would be a highly ambiguous and anomalous creature, a kind of potential mediator between the two worlds of humans and animals, acting as an agent for the transference, through the hunt, of animal life-forces into human powers.”

The IGM record, however, implies that further distinctions could be made within such a metaphorical and clearly ambiguous role. Placement of mandibles in male graves at Vlasac and Lepenski Vir could probably be interpreted along the lines of Tilley's argument, that it was a metaphor for certain beliefs related to hunting, but other possible meanings should not be excluded. The Vlasac dog burial, whether it was isolated or related to the woman buried close to it, implies yet another metaphorical role for the dog, which is not related to ideas maintained in respect to hunters and hunting, but rather to the human settlement itself. The peripheral position of this dog's burial in relation to the settlement and formal disposal area may imply its role as a guard dog, and moreover its role as a metaphor that could reinforce an idea of maintaining order in the world as it was

perceived by the local foragers, comprised of both the actual world and the mythical world of the ancestors. Both the IGM and later Scandinavian Mesolithic communities had reason to ensure that their world was well encapsulated from the different way of life and different values of their Neolithic neighbours. The existence of Mesolithic/Neolithic contact and its consequences is another point of similarity between the IGM and the South Scandinavian Late Mesolithic, notwithstanding their chronological and geographical distance.

In regard to the ambiguous symbolic meanings associated with the dog, perhaps it should be explored beyond the dichotomy of person::beast or domestic::wild. Dog remains scattered around the settlement show not only that they were eaten, but also that they were not paid any special respect (since their bones were left to be scavenged). I assumed in my earlier discussion on the relation of humans to wolves in the IGM that wolves had a special animal status in view of the scarcity of their bones on sites, apparently disproportionate to the probable actual capture of wolves for fur¹⁹. The dog did not replace the wolf's role as metaphor in the IGM belief system, whatever the metaphor's precise meaning.

As stated above, dog mandibles in hunters' burials in the IGM are assumed to be related to the dog's role in hunting. However, in the broader context of IGM funerary practices, and in view of various associations of human and animal mandibles to burials and architectural remains, some other probable mean-

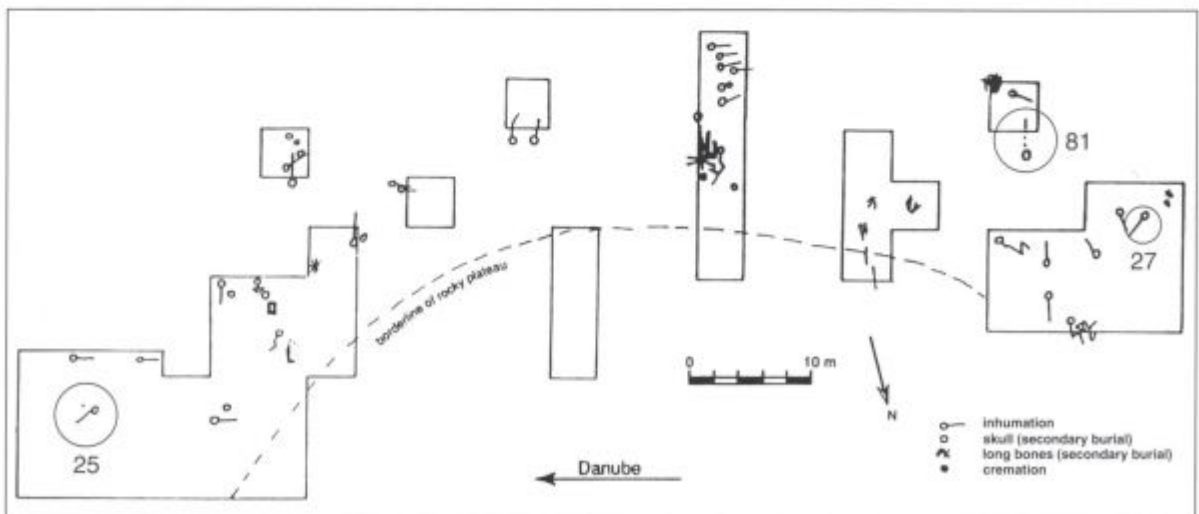


Fig. 6. Location of burials associated with dog remains in the Vlasac II/III formal disposal area (after Radovanović 1996).

¹⁹ There also are some other bone 'scarcities' in the IGM which need to be re-examined along these lines, such as those of beluga and perhaps auroch (Radovanović 1996.53–54, table 2.9; 1997.89).

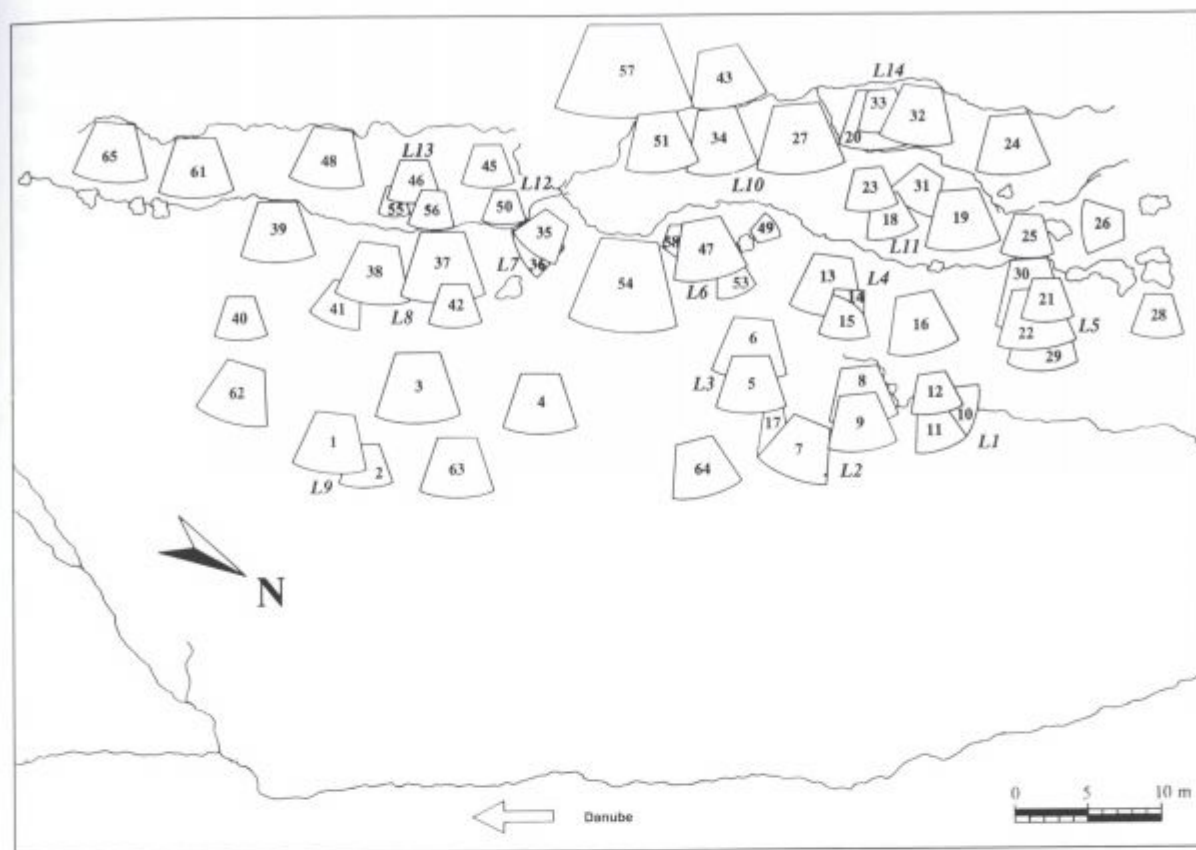


Fig. 7. Location of house 32 in Lepenski Vir (phase 3) (after Radovanović 1996).

ings could also be discerned (Radovanović 1996b). For instance, if only an association of burials and mandibles is considered, one can see the following associations and oppositions: man::dog mandible and woman::man mandible. Woman::man mandible is noted only in Vlasac. Man::dog mandible is noted at Vlasac and Lepenski Vir. At Lepenski Vir it is in fact man secondary burial::dog mandible associated with the rear of the hearth in house 32 (phase 3). On the other hand, it must also be noted that all burials associated with dogs at Vlasac (including the burial of a woman with a decapitated dog burial nearby) are oriented perpendicularly to the river's course in contrast to the then already prevailing orientation parallel to the river. A further observation is that man-dog mandible burials are placed with the human head facing the rear of the settlement, similarly to the rare burials in a sitting position found elsewhere in the IGM (and one in Vlasac, too). Their position and orientation on the steep Vlasac terrace may imply that they are, in a manner of speaking, watching over the entire settlement. It can further be observed that each of the man-dog mandible burials is placed at the extreme ends of the settlement: one is at the furthest point upstream and another is at the furthest point downstream (Fig. 6). The man-dog mandible burial in house 32 at Lepen-

ski Vir is also placed at the very rear of the settlement. Such a position may further reinforce the interpretation that these burials symbolised 'guarding' (Fig. 7). In regard to the female burial, it is also oriented perpendicularly to the river, but her head is pointing toward the river. The orientation of the grave is thus the opposite of that of the men. However, the dog burial by her legs marks the rear of the settlement boundary.

Thus, the man-dog mandible association could be interpreted as not necessarily related primarily to hunting, but also, as in the case of the 'proper' dog burial, to guarding both the settlement and the ancestors buried within it. In view of this interpretation, one could question whether the dog in the IGM is really placed only in "no-man's land" between person and beast (Serpell) or between the human and animal world (Tilley). The dog's place could also be that of a guardian, on the border of and communicating between the actual and the ancestral world of the IGM, and perhaps also on the border of the IGM world and that of their Neolithic neighbours. Therefore, the association human burial + dog + human burial location + human burial orientation suggests meanings of encapsulation and protection of a worldview. On the other hand, the dog mandible

and decapitated dog suggest the presence of a number of other 'referential extensions', which act as 'point metaphors' (Tilley 1999.266) in the IGM belief system's framework, or even better, of the network, a concept I explore elsewhere (Radovanović *in prep.*).

In summary, the human/canid relationship in the IGM reflects different attitudes toward wolves on the one hand and dogs on the other. Although there would have been no dogs if the wolf had not been tamed, both the dog and the wolf seem not to have been experienced in terms of the biological continuity of the process of domestication in the Early Mesolithic. The wolf probably maintained a metaphorical role that dated back to Upper Palaeolithic times. It would probably be more appropriate to ascribe the ambiguous meaning of 'neither person, nor beast' to wolves (and some other animals), for they were integrated into the worldview of foragers as unthreatening, 'social others'. The metaphor of the wolf would have acquired a 'threatening' connotation only after animal husbandry had been well estab-

lished. The attitude toward the dog was entirely different. It is also ambiguous, but it is ambiguous in the same way that perhaps the attitude of humans to other humans might be. The dog, as a species, is physically entirely incorporated into the human world, and each dog's treatment was largely dependent on its particular relation with humans; its 'dog status' depended on the strength of its developed bond with humans. Some dogs were considered as pets and friends or as good work (hunting or guard) dogs, and the ethnographical record is explicit in that such dogs were not eaten except for sacrificial purposes in some societies. As a rule, a pet dog - a friend - is not eaten even in cultures where dogs are bred as a food resource (Serpell 1995.248-249). But other dogs that did not gain such a status probably were. The metaphorical role of the dog is generally similar to that of the wolf in that it is related to certain aspects of its behaviour valued as desirable in a particular human society, and as we have seen, this was probably the case in the IGM also. However, the content of the dog and wolf metaphors was entirely different.

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