
SOCIAL CONTEXT OF THE EMERGENCE, DEVELOPMENT AND ABANDONMENT OF THE VARNA CEMETERY, BULGARIA

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Abstract: In this article, we outline some of the key characteristics of the social structure of the Climax Copper Age in the eastern Balkans and the contributions of the Varna cemetery to those developments. We continue by examining the implications of the new series of 14 AMS dates from the Oxford Radiocarbon Laboratory, which represent the first dates for the Varna Eneolithic cemetery on the Bulgarian Black Sea coast. Representing the first phase of the AMS dating project for the Varna I cemetery, these dates have been selected to provide a range of different grave locations, ranges of grave goods, and age/gender associations. We conclude by addressing the question of the unexpectedly early start of the cemetery, as well as its apparently short duration and relatively rapid demise.

Keywords: AMS dates, Bulgaria, cemetery, gold, social structure, Varna

INTRODUCTION

The Varna cemetery was discovered by accident in 1972 in the Black Sea coastal city of the same name (Fig. 1). An area of 7500 m² yielded 294 graves (Fig. 2) dat-



Figure 1. Location of the Varna I cemetery (starred), Bulgaria.

ing to the Eneolithic (Copper Age) period. What marked the site as truly significant was the large accumulation of gold objects recovered in a small number of graves. Over 3000 objects of a wide range of design and weighing more than 6 kg were excavated. The excavator of the site, Ivan Ivanov, claimed the material dated to the fifth millennium BC, and was therefore the earliest evidence for goldwork in the world (Ivanov 1975). In addition to the goldwork, the grave goods included 160 copper objects, more than 230 flint artefacts, about 90 stone objects and more than 650 clay products, as well as over 12,000 *Dentalium* shells and about 1,100 imported *Spondylus* shell ornaments (bracelets, necklaces and appliqué). Among the burials were 43 graves with no human remains. Some of these so-called 'cenotaph' graves contained clay masks with gold objects placed strategically on the location of eyes, mouth, nose and ears. Although the specific social structure underpinning the Varna cemetery is disputed – from early state formation (Ivanov 1975; Todorova 1976) to chiefdom (Renfrew 1978) – there can be little doubt of the hierarchical nature of the social relations that resulted in such a massive accumulation of exotic prestige objects (Chapman 2000a; Renfrew 1986). While group solidarity has been emphasized in the creation of the Varna cemetery through a series

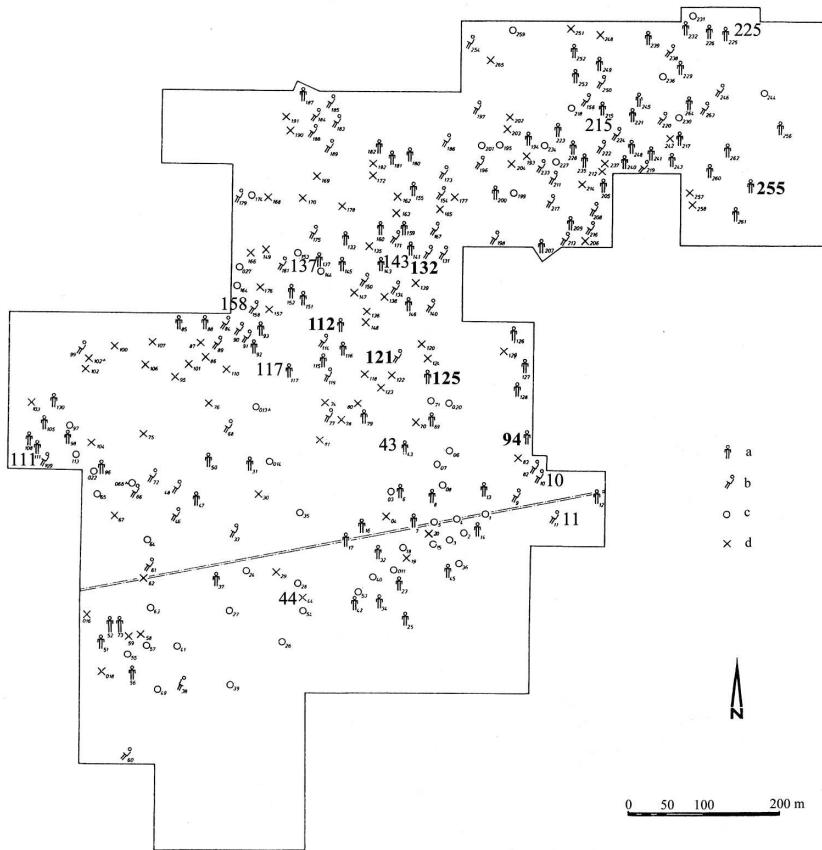


Figure 2. Plan of the Varna I Cemetery: (a) extended inhumations; (b) contracted inhumations; (c) symbolic graves (cenotaphs); (d) damaged or destroyed burials. Graves with AMS radiocarbon dates are asterisked. (Source: Ivanov 1988, with modifications.)

of communal events (Bailey 2000:284), this principle does not begin to explain the intra-group differentiation.

Ever since its discovery, the Varna I cemetery has continued to pose questions about its origins, significance and meaning. In this article, we seek to paint an impressionistic sketch of what it meant to be a person in the east Balkan Eneolithic. We stress that an important part of personhood was the ways in which the person negotiated an increasingly diverse set of cross-cutting relations, that included more hierarchical forms of relating. The resultant tensions between social integration and social differentiation produced much of the dynamic of these complex societies. The sketch itself forms part of a much longer treatment, in which the theoretical justification and the archaeological evidence for many of these claims are discussed at length (Chapman and Gaydarska 2006).

PERSONHOOD AND HIERARCHY IN THE CLIMAX COPPER AGE

One valuable starting-point is the consideration of general perspectives on the development of new community structures (for full details, see Chapman and Gaydarska 2006). A major feature of later prehistory is the emergence of new kinds of persons emerging simultaneously with their definition (for a theoretical background to such developments, see Blake 1999; Chapman 2000b). The creation of new types of person would have been of major importance at times of widespread change, such as the emergence of farming in the seventh–sixth millennia cal BC and the social differentiation attested in the fifth millennium cal BC in the Late Copper Age. The latter has been termed the ‘Climax’ Copper Age in the light of the maximum diversity and quantity of archaeological remains as well as the technological apogees found in lithic and metal manufacture (Chapman 2000a; Nandris 1975). The people of each period would have been transformed by the impact of new social relations, new kinds of social groupings and new raw materials (Chapman, in press). Some of these trends would have been represented in the large and diverse figurine assemblages so characteristic of this period (Bailey 2005).

The period of the emergence of farming provides some background examples of the processes of change involved. During these generations, new types of person were created, in particular the ‘farmer’ and the ‘herder’ but also the ‘potter’, the ‘polished stone tool-maker’ and perhaps the ‘brewer’. A term such as ‘potter’ does not necessarily imply a full-time occupation or specialization, nor even the only, or essentialist, identity of a particular person but emphasizes the kind of activities through which persons were recognized through the possession of distinctive embodied skills. These new types of person co-emerged with new foodstuffs and objects, such as flour, bread, lamb chops, barley beer, pottery and axes – the one could not have occurred without the other. Notions of personhood would have been influenced by the wide range of new relations, not least gendered relations, based upon these identities, as well as by their interplay with traditional types of person – ‘hunter’, ‘shellfish-collector’, ‘flint-knapper’ and ‘leather-worker’. The communal values of the new products went hand in hand with the status of their creators. It is probable that, while those dwelling in dispersed homesteads would have included some of these new classes of people, meeting others seasonally, tell villagers would have included the full range of types of persons, with everyday contacts for most people. The later discovery of secondary products would have ushered in new episodes of person-creation, with ‘dairy producers’ producing milk, cheese and yoghurt while ‘ploughmen’ harnessed animal traction, as well as the diversification of traditional persons such as weavers, now making woollen textiles, and carpenters, now shaping wooden wheels, planks and complex joints for carts. The values assigned to the new things transformed the traditional system of communal values, itself confirming new statuses for new types of person.

Turning to the Eneolithic, we can see the emergence of many other categories of persons, some appearing like ‘specialists’. Before flint and copper mining, there would have been no need to characterize such a person as a ‘miner’. Raduntcheva (2003, 48–60) has enumerated the wide range of Climax Copper Age persons

needed for the successful development of intensive copper mining. The picture that Rauntcheva paints is of the co-ordination of a large number of persons, as well as many *types* of person, each with complementary skills. While some crafts, such as carpentry, basket-making and rope-making, represented the development and intensification of traditional tasks, other interest groups comprized persons with wholly new skills. The introduction of metal finishing tools, as deposited in grave 4 in the Varna cemetery (Ivanov 1988:Abb. 22; Marazov 1988:74–75), changed the embodied skills on which a carpenter relied. The novel interest group of ‘miners’ would have been united by a shared practice of communal labour and a communally validated system of rewards for the production of a valued material. The same would have been true of ‘gold-panners’, ‘copper smelters’, ‘mould-makers’ and potters with gold-painting skills (Eluère and Raub 1991). At the same time, some persons involved with bone tool making may have also been specialists in pottery decoration. The interests of these groups of skilled persons were probably not identical and may have overlapped very little with, for instance, the interests of those farmers who provided seasonal supplies for those concerned with making copper axes. The cross-cutting interests of such groups would have created such a differentiated society that complex and powerful practices of integration would have been required. The possibility of hierarchical differentiation is supported by the evidence from several Climax Copper Age tells and cemeteries for both personal and household differentiation (Chapman 1990), suggesting a degree of personal and corporate indebtedness.

In the Climax Copper Age, however, the messages from the objects and from the built environment were curiously contradictory. Both villages, houses and their respective patterns of access embodied geometric order and qualities of symmetry, precision and compartmentalization to a high degree, creating stronger constraints upon social practices than in the Neolithic. But, in Copper Age material forms in all media, the explosion of diversity and differentiation threatened the principle of standardization that was, in any case, not so strongly expressed in the built environment as the other geometric principles, thus creating tensions with the continued embodiment of symmetry, precision and compartmentalization. The paucity of rules governing aspects of Copper Age ceramic production, allowing, for example, the placement of any decorative style on any vessel form, emphasized the limits on the representation of principles of integration – perhaps a temporary response to the inherent tensions between diversity and integration. What was widespread was the cross-cutting method of categorization, which celebrated and reinforced diversity. The significance of the cross-cutting principle of categorization underlined the fractal¹ aspect of personhood, which was expressed in the multiple combinations of persons in a diversity of limited interest groups (e.g. the fragmentation analysis of the Durankulak grave goods: Chapman 2000a). The proliferation of limited interest groups, whether household units, kinship groups, occupational units or age-sets, was a principal aspect of Copper Age identity. Persons grew out of these limited interest groups, creating identities by principles of categorization which were materialized through the increasingly complex ceramic assemblages of the period (Chapman and Gaydarska 2006:ch. 2). It is interesting that it was only at

Varna – the place of greatest material differences between mortuary sets and even more pronounced than at Durankulak – that there were signs of the hierarchical structures which were one way to resolve issues of how to integrate societies characterized by increasing complexity and diversity. In the post-Varna phases of the Climax Copper Age, cross-cutting categories were stronger than oppositional categories in ceramic assemblages such as from Dolnoslav (Chapman and Gaydarska 2006:ch. 2).

The institutional basis of Neolithic and Copper Age lifeways revolved around the family, the limited interest groups, the corporate groups and the community as a whole. The key issue of power relations is strongly implicated in community integration and intra-settlement differentiation. The domination of alternative interest groups by the agendas of the community head or the corporate group leaders would have led to a scenario of greater community integration. An alternative scenario whereby household heads or limited interest group leaders wielded greater power, using it to reduce the influence of corporate groups or the whole community, would have favoured differentiation, unless the household possessed the structure of the entire community writ small, as Sahlins proposed for the domestic mode of production (Sahlins 1974). What we can see represented in Climax Copper Age material culture is the tension between integration and diversity. This is consistent with a varied and complex picture of institutional differentiation, with several potentially competing power bases seeking to integrate the varied households and limited interest groups to their own benefits (Chapman and Gaydarska 2006).

A major aspect of change in Climax Copper Age societies concerned an intensification of the enchainment of increasingly wide groups of people through the exchange of exotic materials, whether pigments for pottery decoration (for graphite, see Leshtakov 2006), stone ornaments and figurines (Georgiev 1955), salt (Chapman and Gaydarska 2003), marine shells (Gaydarska et al. 2004) and especially flint (Manolakakis 1996) and metal objects (Dimitrov 2002; Todorova 1981). The surface exposures of northeast Bulgaria provided high-quality flint for macroblade production for settlements over much of the south Balkans, as well as in the north Pontic and eastern Carpathian zones (Chapman 2003:in press; Manolakakis 1996: n.d.). The difference between such exotic flint and local flints and cherts amplified the contrast between the local and the exotic on which everyday social reproduction was increasingly based. The lead isotope analyses of Late Copper Age metal objects indicated the use of many different copper sources in all parts of the Balkans (Gale et al. 2000; Pernicka et al. 1993, 1997). All of these cases point to the overall conclusion that the entanglement of the exotic in the identities of local people reached its apogee in the Climax Copper Age. It was probably only in this period that specific classes of exotic object – particularly figurines, flint and graphite, and sometimes ornaments and metalwork – became common enough on a typical tell settlement for their re-categorization and institutionalization as a necessary part of key social transactions.

Neolithic and Copper Age people manifested the diversity and reach of their enchainment regional networks through the display of exotic objects connected to a

long chain of persons. To the extent that exotic objects underpinned social reproduction as marriage- or child-payments, those unable to participate directly in the exchange network would have been impelled to enter debt relations to acquire these socially vital things. It is difficult to estimate the proportions of tell households lacking the enchained resources necessary to acquire exotic objects from their region; participation in key ceremonial practices would have been harder for people at certain stages in their life (e.g. older females and males, parents with young children, etc.). There must have been many families from dispersed homesteads who would have found participation so problematic that they would have entered into some form of indebted relationship, which could be characterized as a 'patron-client' relationship – a relationship based upon inequality resulting from differing access to exchange networks. A likely result was the co-emergence in the Climax Copper Age of the patron-client relationship with a wider variety of personal wealth. Characterized by the provision of the client's labour for the patron's projects, whether building, ploughing, harvesting or the gathering of a diversity of resources, the relationship formed the basis for initially small-scale inequalities that could eventually have become institutionalized. Such a development created a rupture in the hitherto seamless web of enchained relations, opening up the possibility that formerly inalienable objects could become the equivalent of labour. The possible co-existence of a practice-based hierarchical relationship between persons and the essentialism of a fractal relationship in which a person grows out of another person must have introduced tensions into both the traditional concept of personhood and the ancestral egalitarianism characteristic of tell-dwelling communities. It is likely that this crisis reduced the emphasis on the fractal aspects of personhood in favour of the more individual aspects, just as the validation of the new 'patrons' would require the possibility of displaying tokens of that new status. Such developments were, however, not so readily achievable in the context of tell settlements, with their emphasis on ancestral egalitarianism (Chapman 1991). It was therefore necessary to extend coeval social space to create new places in which the face of individuality could be displayed without such a threat to the settlement community. This is why we can recognize, in general, a major expansion in the creation of cemeteries in the Climax Copper Age in northeast Bulgaria, while at the same time recognizing the particular significance of an inter-community cemetery such as at Varna.

NEW AMS DATES FOR VARNA I

The excavations of what became known as the Varna I cemetery continued into the 1990s but a full publication of the site and its archaeological finds is still awaited. The vast majority of the graves contained pottery stylistically dated to the Later phases of the Late Copper Age Varna culture – the so-called Varna II–III phases (Ivanov 1988, 1991) – dated to the late fifth millennium cal BC at other sites (Ivanov and Avramova 2000:12; see also Boyadzhiev 1995). However, there are no closely dated settlements of the Varna culture which can be used to provide parallel dates for the Varna I cemetery. The relative dating of the grave goods would necessarily

rely on typological parallels from other regions, with their own specific cultural developments, none of which would provide sufficient accuracy for dating the cemetery. The question of regional and inter-regional chronological relations between Varna I and other areas has therefore remained open. We have obtained a large number of human bone samples ($n = \text{over } 70$) from the Varna I graves for AMS radiocarbon dating and palaeodietary analyses using stable isotopes of carbon and nitrogen (for isotopic dietary results, see Honch et al. 2006, in press). The bones were collected in late 2003 and again in mid-2004 from the Institute of Experimental Morphology and Anthropology, Sofia, thanks to the friendly co-operation of Y. Yordanov and S. Dimitrova. The radiocarbon dates reported here constitute the first AMS dates for the Varna I cemetery.

Two sets of samples have been dated, comprising a total of 14 AMS dates, all on human longbones from Varna I graves. The initial choice of samples for dating was based upon three principles: first, the availability of well-preserved longbones; second, the investigation of graves in different zones of the cemetery; and, third, graves with a wide range of quantities of grave goods (Fig. 2 and Table 1).²

The results of the 14 dates were very consistent with one another (Table 2), implying a 4600–4400 BC range in calendar age (Fig. 3). One question that arises over the accuracy of these human bone dates is the possibility of a marine reservoir effect from the Black Sea or, indeed, the uptake of depleted ¹⁴C from aquatic or freshwater fish. The uptake of marine protein by humans can result in offsets from ‘true age’ since the concentration of radioactive carbon in oceanic reservoirs is not in equilibrium with the atmosphere (Reimer and Reimer 2001). Three sets of paired animal and human bones excavated from within the same burial context were dated to determine whether there was an offset between the two, which could indicate reservoir effects (burials 111, 117 and 143). A comparison of the AMS results suggests a low probability of a substantial reservoir effect in the Varna I humans. Two of the three pairs we analysed disclosed no statistically significant difference between the animal and human bones dated. The third sample produced a significant difference, but the collagen extracted from the animal bone was lower than the acceptable threshold of one per cent. The present carbon isotope data suggest no significant marine protein in the diet of the Varna humans and a low probability of offset from true age due to reservoir effects.

A Bayesian statistical analysis of the Varna radiocarbon determinations, using OxCal 3.10 (Bronk Ramsey 2001) and the INTCAL04 calibration curve (Reimer et al. 2004), allowed the incorporation of associated archaeological information within the chronometric analysis in an explicit manner (for details, see Higham et al. in press). In the absence of stratigraphic constraints between the dated burials at the Varna cemetery, we initially modelled the entire corpus as a single phase. The results suggest an overall span of cemetery use of 70–155 years (with a highest probability of 110 years). The probability distribution representing the boundary date prior to the use of the site as a cemetery (equivalent to the *terminus post quem* for Varna cemetery) was 4605–4550 BC (68.2% probability) with the highest probability associated with 4550 BC. The distribution representing the boundary for the end of the use of the cemetery (i.e. a *terminus ante quem*) was 4480–4425 BC (again at 68%

Table 1. Grave information and descriptions of associated grave goods of samples dated at ORAU. (Source: V. Slavchev, Varna I cemetery archive.)

Grave no.	Description
Grave 10	The depth of the burial pit is 1.80 m. Contracted inhumation of a 25–30-year-old male, placed on the left side, oriented to 70°. Grave goods – fragments of a clay vessel and a flint blade.
Grave 11	The depth of the burial pit is 1.11–1.26 m. Contracted inhumation of a young female, placed on the right side, oriented to 38°. Grave goods – lumps of red ochre, two clay lids and three clay vessels, copper and bone rings, a copper needle, a flint blade and a necklace of cylindrical lignite beads.
Grave 43	<p>The depth of the burial pit is 2.20 m. Extended inhumation of a 40–50-year-old male, with a height of c.1.70 m, oriented to 24°. The rich grave goods comprise: gold earrings and circular appliqués used for the ornaments of a head-dress. Two gold bracelets on both forearms, with a <i>Spondylus</i> bracelet on the left forearm, broken in two pieces and repaired with gold plates. Gold-ring bracelets on both wrists. The deceased was buried in clothes trimmed with gold and carnelian beads and circular gold appliqués. On the thorax, there was a large circular gold appliqué. Above the left side of the pelvis, there were two rectangular gold plates. On the right side of pelvis, there was a gold penis sheath. Above each patella was one circular gold appliqué.</p> <p>West of the skull, there was a clay bowl. East of the skull there were golden fittings for a quiver and a clay pedestal. On the left side of the skeleton was a bow, with its gold fittings, and two spears, one with a flint point, the other with a copper point. On the left forearm, there were two bone needles. In his right hand, the deceased held a stone axe-sceptre, whose handle had been inserted into gold tubes and rings, and a copper axe. Above his chest there were some fine fragments of a clay vessel with a lid. On the right side, there was a flint blade above his pelvis. One more flint blade was placed on the pelvis, with a third on the left side, by the left femur. Between the knee joints, there were copper and stone axes and a stone adze. Left of the left patella, there was a copper adze, awl and needle and a stone adze. The remains of a clay vessel were placed in the grave-fill.</p> <p>It is the richest inhumation grave in the whole cemetery. This fact, together with the axe-sceptre and gold penis sheath, suggests that the leader-priest of the Varna community was buried here.</p>
Grave 44	Heavily damaged by agricultural works. The depth of the burial pit is 0.95–1.03 m. Extended inhumation without grave goods.
Grave 94	The depth of the burial pit is 0.69–0.84 m. Extended inhumation, oriented to 43°, with the head facing North. Grave goods – a decomposed clay vessel.
Grave 111	The depth of the burial pit is 1.50–1.68 m. Extended inhumation of a 30–35-year-old male, oriented to 39°. Grave goods – two antler hammer-axes, unidentified antler tool, stone adze, five clay vessels and lumps of yellow ochre.
Grave 112	The depth of the burial pit is 1.12–1.30 m. Extended inhumation, oriented to 20°. Grave goods – a copper needle, a flint blade, a miniature trapezoidal polished limestone adze, a heavily destroyed deer antler tool, a necklace of

(Continued)

Table 1. (Continued)

Grave no.	Description
	three beads from metamorphosed ultrabasite and 11 <i>Spondylus</i> beads, five clay vessels, only two of them were complete and small fragments of a ceramic sieve.
Grave 117	The depth of the burial pit is 1.30–1.40 m. Extended inhumation of an adult male, oriented to 29°. Grave goods – copper awl, flint blade, an antler hammer-axe, two <i>Spondylus</i> bracelets and four clay vessels.
Grave 121	The depth of the burial pit is 1.05–1.17 m. Contracted inhumation on the right side, oriented to 35°. Grave goods – two decomposed clay vessels.
Grave 125	The depth of the grave pit is 0.81–0.89 m. Extended position, oriented to 23°. Grave goods – a decomposed clay vessel.
Grave 137	The depth of the grave pit is 1.45 – 1.60 m. Extended inhumation, oriented to 45°. Grave goods – one clay vessel.
Grave 143	The depth of the burial pit is 2.60 m. Extended inhumation of a young male (16–20 years), oriented to 28°. Grave goods – a gold crescentic plate, a copper axe and an awl, a flint blade and a scraper, stone adze, an antler hammer-axe, a necklace of carnelian, lignite and <i>Spondylus</i> beads, two <i>Spondylus</i> bracelets, six clay vessels and lumps of red ochre.
Grave 158	The depth of the burial pit is 1.20–1.30 m. Contracted inhumation of an infant, place on the right side, oriented to 3°. Grave goods – marble necklace, <i>Spondylus</i> and metamorphosed ultrabasite beads, four <i>Spondylus</i> bracelets and three clay vessels. The deceased has been buried in clothes trimmed with <i>Spondylus</i> appliqués.
Grave 215	The depth of the burial pit is 0.89–0.96 m. Extended inhumation of a young adult of uncertain sex, oriented to 34°. Grave goods – two flint blades, an antler tool (?awl) and two clay vessels.
Grave 225	The depth of the burial pit is 0.39–0.42 m. Extended inhumation of an adult, probably female, buried with sherds from one vessel.
Grave 255	The depth of the grave pit is 0.65–0.93 m. Extended inhumation of an adult, probably female, oriented to 352°. Grave goods – a gold pendant, a copper axe-hammer of the ?oka–Varna type, a copper needle, a flint scraper and a polished stone adze were found in the grave.

probability), with the highest probability of 4450 BC. Such a preliminary conclusion naturally requires confirmation from the second phase of the AMS dating project.

The new dates for the estimated timespan of the Varna cemetery are equivalent to what has been termed the Middle Eneolithic in other parts of Bulgaria (Boyadzhiev 1995). However, the ceramic and metal grave goods at the Varna I cemetery clearly point to a typological date in the later stages of the Late Eneolithic. Many of the artefacts from Varna I have close parallels with other examples in northeast Bulgarian sites. These include the Devnya, Goljamo Delchevo and the Durankulak cemeteries (Todorova 2002; Todorova et al. 1975; Todorova-Simeonova

Table 2. AMS dates from the Varna I cemetery (solid horizontal lines show paired dates from the same grave).

Burial	OxA no.	Bone	Radiocarbon age BP	$\delta^{13}\text{C}(\text{‰})$	$\delta^{15}\text{N}(\text{‰})$	CN	Wt. % collagen	Pre-treatment yield (mg)	Carbon(%)	Nitrogen (%)
94	13250	Human	5626 \pm 31	-18.6	10	3.2	3.7	26.1	42.8	15.6
112	13251	Human	5702 \pm 32	-18.6	11	3.1	1.2	9.4	39.9	14.8
121	13252	Human	5672 \pm 34	-18.9	9.7	3.2	1.4	7.6	36.1	13.4
125	13253	Human	5685 \pm 33	-18.6	9.9	3	3	19.6	43	16.5
255	13254	Human	5732 \pm 33	-18.5	10	3.2	2.5	14.2	44.3	16.1
43	13685	Human	5720 \pm 29	-18.4	11	3.2	5	31.6	44.7	
11	13686	Human	5639 \pm 32	-19.5	10	3.2	2.5	13.1	44.9	
10	13687	Human	5569 \pm 32	-19.1	n.d.	3.2	0.9	5.0	41.9	
158	13688	Human	5787 \pm 30	-19.3	9.8	3.2	2	11.0	42.7	
215	13691	Human	5668 \pm 32	-19.6	11	3.2	1	6.5	42.9	
44	13692	Human	5657 \pm 30	-19.6	11	3.2	4	23.6	43.6	
225	13693	Human	5660 \pm 29	-20	9.1	3.2	5.5	30.0	43.8	
137	13694	Human	5654 \pm 36	-19.8	n.d.	3.2	5.8	35.1	44.8	
111	13865	Human	5855 \pm 34	-18.3	11	3.2	8.2	58.9	43.8	
111	13846	Animal	5757 \pm 34	-19.4	n.d.	3.2	2.4	16.5	42.8	
117	13848	Human	5766 \pm 36	-19	10	3.2	2.7	18.6	42.4	
117	13811	Animal	5530 \pm 36	-20.2	n.d.	3.3	0.5	3.2	41.8	
143	13689	Human	5690 \pm 32	-19.7	9.7	3.2	1	6.6	43	
143	13690	Animal	5700 \pm 30	-19.7	10	3.2	2.6	17.9	43.1	

1971), as well as the Goljamo Delchevo tell site (level XV; Todorova et al. 1975) and the Ovcharovo tell (particularly levels XI–XIII; Todorova et al. 1983). The vessels from grave 112, the gold pendant and the copper axe-hammer indicate that these graves can be assigned typologically to the last (III) phase of the Varna culture. The absence of fit between the AMS dates and the typological determination of the material culture could be resolved by accepting the notion that material culture is not adopted monolithically across a region or regions but its adoption can be dated to different centuries in different regions. The acceptance of spatially variable transmission of material culture has been documented for the Vinča group in the west Balkans (Chapman 1981). In the case of Varna I, the innovative material culture deposited in certain high-status graves was not only important because of their individual quality, their sheer quantity or the associated things, people and places but also because the objects were some of the earliest such things to be made in styles characteristic of what we would now term the 'West Pontic Late Eneolithic'. In summary, the new AMS dates take back by one or two centuries the beginning of the Late Copper Age in the Black Sea zone – to the 46th century cal BC.

WIDER SOCIAL SIGNIFICANCE OF THE NEW DATES

The new Varna I dates have many important consequences, not least for the start, the duration and the end of the burials. The key implication is that the Varna Lakes area was a centre of social and cultural innovation within the Black Sea zone, with their enchained social relations transmitting innovations in ceramics and metal objects at different rates to other parts of the east Balkans. This is puzzling in view of the apparent absence of very early Late Eneolithic settlement discard on those Varna Lakes sites occupied later in the Late Late Eneolithic (pers. comm. I. Ivanov 1996). Thus, there appears to be a settlement gap during the first decades of use of the Varna cemetery – a hiatus filled by the development of a settlement network on the shores of the Varna Lakes some time into the local Late Late Eneolithic (e.g. Todorova and Toncheva 1975). While the settlement finds around the shores of the Varna Lakes were unstratified because recovered from dredging operations, the Late Copper Age date of settlement is confirmed by ^{14}C dates from pollen cores showing episodes of deforestation shown by sharp decreases in oak pollen (Bozhilova and Filipova 1975). This settlement phase may represent a colonization of the Varna Lakes area over what is, on an archaeological time-scale, a relatively short period; it is even possible that the settlement was attracted by the dramatic and large-scale collective depositions in the Varna I cemetery. One trajectory worth investigation is the possibility of diverse points of origin for the settlers, for example from both the coastal zone and inland northeast Bulgaria, producing a melting-pot of cultural traditions leading to a regional centre of innovations. This would consolidate the links of the Varna Lakes area to several regional settlement networks in a novel way for east Balkan prehistory – what the Late Andrew Sherratt (1972) termed 'network linkage'. But it does not resolve the issue of which communities distributed prestige innovations inland and up and down the Black Sea coast in the final centuries of the Middle Copper Age (or, indeed, where they lived).

Coeval with the major extension of this social network, however, the mortuary space at its centre was conceptually and spatially separated from any place of dwelling. The use of extramural cemeteries was already present in the Hamangia mortuary tradition of the Black Sea coast (viz. Late Neolithic and Earlier Eneolithic; Todorova 2002) – a practice that spread inland at the start of the Late Eneolithic. This greater distancing of the mortuary from the domestic domain indicates a parallel and deeper decoupling of ritual practices, leading to the more intense ritualization of mortuary practices than was evident in household mortuary ritual through the creation of more public performance space (Bailey 2000:208). But this separation denied preferential local or regional access to the core cemetery, constituting Varna I as a place with the possibility of becoming a supra-regional focus.

The absence of a linear or zonal spread of early graves to late graves across the cemetery is still a tentative finding, based upon only the 14 new AMS dates. However, if confirmed, the spatial distribution of dates indicates the possibility that all areas of the cemetery were receiving burials from the outset. This suggests that several communities may have been burying clusters of burials in different areas of the cemetery from an early stage of its use rather than a single community burying their members in widely dispersed parts of the mortuary space. If so, their links to a widespread social network of communities would have required the negotiation of their identities both within their own communities and between groups with recently developed exchange relations. The very establishment of a focal cemetery for the ancestors of this widespread network could have led to a strong development of place-value at Varna I, in turn strengthening the network as an emergent and significant socio-political force.

Not surprisingly, the greatest emphasis in studies of Varna has been placed on the richest graves. Here, we shall explore the full range of grave goods in burials, from no grave goods at all to the richest graves in the cemetery, so as to define the total role of the mortuary zone in social reproduction. Our starting point is that *all* grave goods evoked the memories of past people, places and things, participating in their history and ancestral qualities as well as their places of origin and routes to the cemetery.

A further issue clarified by the new AMS dates concerned whether or not there was any significant difference between the age of the dated burials that contained few grave goods, and those that contained more significant mortuary offerings. We found that burials containing few deposited artefacts clustered towards the later phase of use of the cemetery. If validated, this tentative conclusion would reinforce the significance of Varna I as a centre of innovation in terms of the massive accumulation of prestige mortuary exotica, with early elite graves creating the momentum for a successful inter-regional social network. This Childean scenario confirms the alignment of the most striking grave assemblages with periods on intense social change – those periods where new status positions were under negotiation (Childe 1945). Given the overall duration of burial practices for just over a century, it may mean that the most spectacular graves were constructed over a period of 50 years – only one or two prehistoric generations. Continuing with the Childean analogy, the absence of the superordinate³ dimension in the later graves at Varna I

would suggest a more stable social structure, with a reduced level of competition for elite roles (Childe 1945). But this phase also may well not have lasted much more than 50–60 years – two or three generations.

These temporal dynamics lead us to consider the difference in social relations between the enormous variations in grave-good deposition – a key characteristic of Varna I. It may be useful to divide this variability into three categories of grave: ‘lavish’, ‘rich’ and ‘poor’ graves. At one extreme lay the 10–15 lavish graves, with thousands of individual objects, many in sets, betokening corporate groups negotiating for social power positions, demonstrating their multiple enchainment relations through the accumulation of exotic mortuary gifts. At the other extreme lay the poor graves (i.e. graves with no grave goods), where we see not an expression of corporate group practices but rather the burial of a member of a household or a small family with no possibility to express the accumulation process through exotic objects. In the middle were a large number of rich graves with a far smaller number of objects and a somewhat narrower range of types of objects than in the lavish graves. What do these differences in grave goods signify?

One way of understanding this contrast expresses the tension between the fractal and individual aspects of personhood. The contrast between individual personhood, with its emphasis on the integration of complete persons, places and things, achieved by accumulation processes and through consumption practices, and fractal personhood, whereby processes of enchainment create persons out of things and vice versa, is a long-term characteristic of later Balkan prehistory (Chapman and Gaydarska 2006). It is plausible that the burial of the newly dead with few grave goods marked the denial of the dominant values sustained by accumulation and the consumption of exotica in favour of the less spectacular values underpinning fractality. The total absence of grave goods in many graves at Varna left only the spatial relation between such graves and other nearby burials intact as a token of communal relationships and a minimal membership of the Varna mortuary community, while simultaneously denying both material accumulation and material enchainment. There are several forms of accumulation attested at Varna – the accumulation of material culture, the accumulation of memories and the accumulation of object biographies (Chapman 2000a:174–179). Part of these practices of accumulation consisted of the materialization of social relations based upon enchainment – the process of relating persons through inalienable gift exchange. The most lavish graves accumulated the most spatially diverse and the most socially differentiated set of enchainment relations. The new AMS dates set the latter trend at the start of the cemetery’s use, indicating an early and probably rapid phase of social differentiation.

The contrast between fractal and individual aspects of personhood at Varna goes some way to an identification of the social practices at work but it hardly addresses the central problem of the magnitude of the difference in grave-good deposition. Here, we return to the emergence of patron-client relations in the Climax Copper Age. As we have seen, the new AMS dates for the Varna cemetery indicate that burials started in the early fifth millennium cal BC, at the very beginning of the Pontic Late Copper Age, only a few generations after the opening of

the Ai Bunar copper mine (Chernykh 1978) and therefore in a period of increasing regional exchange. It may be helpful to think of the co-emergence of a 'busier' exchange network carrying more items in enchainment with the growth of the Varna I supra-regional cemetery domain that stimulated far more demand for prestige goods than earlier. These expanded regional exchange networks were able, perhaps for the first time, to provide each tell settlement with a number of prestige copper objects not so great that every household could possess one or more but sufficient for several, if not many, households to keep one. This differential control of gifts to underpin key rites of passage (marriage, birth, adolescence) gave power to certain households on a tell to control key social transactions. It also differentiated homesteads lacking access to exchange networks for copper objects from tells that were connected by traditional gift-exchange relations. The other novel development arose from the intensification of regional exchange, which itself led to greater contact between regional élites and a more homogenous inter-élite expression of the new status. This allowed, for perhaps the first time, the development of an inter-regional paramountcy in which the more intensive interaction between regional leaders created a new kind of person – the 'great man' – someone whose power was based on prestige gift exchange and the possession-in-trust of exotic sacred objects central to the identity of the lineage (Godelier and Strathern 1991).

The generation of new patron-client relationships and a new inter-regional paramountcy at the end of the Middle Copper Age created two social crises – a crisis in the communally accepted form of personhood and a threat to the egalitarian basis of ancestral dwelling on the tell from a new level of conspicuous, competitive consumption that could not be contained within the traditional ancestral domestic arena. It was the emergence of these social crises that led to the co-emergence of a new arena of social power to validate the newly developed patronal roles as well as the new role of great man – the mortuary domain (Chapman 1991). The most important of such mortuary arenas was created at Varna, while another prime example, if with no truly lavish graves, was the Late Copper Age zone of the Durankulak cemetery (Todorova 2002). At Varna, members of those families with client-based relationships to the local and regional patrons were buried in the graves with no or very few grave goods, while the large number of wealthy graves outside of the core of the cemetery symbolized patrons displaying their regional exotica as a sign of their new social roles as patrons. The most lavish graves at Varna were reserved for those members of the inter-regional élites whose lineage was supporting their claims to succeed the newly dead great man – in short, to assume the position of the next great man.

It is our suggestion that the lavish, wealthy and poor graves at Varna stood for three new types of person emerging in the early decades of the use of the Varna I cemetery – the great man, the patron and the client. Each type of grave combined the fractal and individual aspects of personhood. In lavish graves with human remains, those complete bodies symbolized the integration of the fractal persona in death, while the exotic grave-goods marked the inalienable ritual goods at the heart of great men's claims, as well as symbolizing a complex web of enchainment

exchange relations criss-crossing much of the south Balkans. The lavish mask graves emphasized the fractal aspect of personhood, with the mask related to the mobile figurine heads and figurine masks that often constituted orphan figurine fragments. The lavish cenotaph graves lacking clay masks underlined the absence at the heart of fractality – the missing body whose social persona was presenced by the grave goods. The elimination of female bodies from the core area of the Varna cemetery (Chapman 2000a) demonstrated the success of the male ideological ploy to dominate the mortuary domain.

The wealthy graves at Varna were articulated extended inhumations, including adult males, adult females and children. The mostly complete bodies were accompanied by mostly complete objects, with the exception of marine shell ornaments, whose fractal relations were linked to the domain of the living rather than to that of the dead. Many objects comprized the rare regional exotica required for key rites of passage that the newly dead had already experienced – in other words, a memory of the very rituals that had enabled the emergence of this type of person in the first place. Similar rich graves from other published cemeteries, such as Durankulak, Devnja, Goljamo Delchevo and Vinitsa, showed strongly gender-based divergences in the construction of personhood: with males emerging out of copper tools, weapons and ornaments; and females developing out of household tools and non-metal ornaments (Chapman 1996; Lichardus 1988; Todorova 2002).

The poor graves represented another type of absence – the denial of the traditional materially enchainned relationships that had been superseded by the new type of hierarchical, patron–client relationship. What is truly striking is that some persons were buried without a single personal object – not even a shell bead or a flint flake; surely a sign of a deliberate decision by the living relatives to eschew fractality in the mortuary context?

The new AMS dates suggest that the highest probability of the duration of Varna I is just over a century – or four prehistoric generations. Considering the number of graves, which would certainly have amounted to over 300 and perhaps exceeded 350 graves, this may well have been a short timespan of use – probably shorter than most archaeologists would have supposed. This may have represented a time–place concentration of burial, with an average of three to four burials per annum – much higher than most other prehistoric cemeteries. By way of comparison, the ^{14}C dates for Earlier Copper Age Tiszapolgár-Basatanya (Hungary) of 4500–3600 cal BC suggest a duration of 900 years for the 154 graves, but critics suggest this duration is far too long (Chapman 2000b; Forenbaher 1993); thus, the estimate is for a burial every three to six years. The ^{14}C dates of 2100–1500 cal BC for Early Bronze Age Mokrin (Serbia) combine with the estimate that the 312 excavated graves form one-half to two-thirds of the total cemetery to suggest three to four burials every four years (Rega 1997). There are no ^{14}C dates for Early Bronze Age Bran? (Slovakia; Vladar 1973) and estimates for the duration of the cemetery with its 308 graves range from 200 to 400 years; giving an estimated three to six burials every four years. While the concentrated sequence of burials at Varna limited the time-depth of the ancestral presence to four generations, the frequency of burial acts would have enhanced the abilities of the communities to compare and contrast the quantities of grave goods

buried with the newly dead, as well as deepening the personal, emotional and kinship links between mourners at successive funerals. It would be important to estimate the spatial range of the Varna social network, in terms of the range of communities having the right to bury their dead at Varna I. A large number of medium-sized communities, each suffering one or two bereavements per annum, may very well have buried only a fraction of their newly dead at Varna I, representing a prior selection of individuals with rights to be buried at Varna I.

The limited number of lavish graves at Varna, representing no more than a handful of great men, buried over 50 years, or two generations, suggests a stabilization of the new social structure by the early part of the Late Copper Age. The widespread presence of both rich and poor graves in other, smaller cemeteries (Chapman 1996; Lichardus 1988) suggests that the patron-client system had become integrated into the social structure as a relatively unproblematic part of everyday practice. However, the structural implications of hierarchical relationships for fractal personhood were severe, leading to increasing tensions in the later part of the Climax Copper Age.

One serious result of these social tensions was the end of the burial tradition at Varna. However, even though the sacred place was abandoned, with no sign of reuse or reoccupation at any time in prehistory, the communities whose dead found their final resting place at Varna continued in existence. According to the calibrated ^{14}C timescale calculated by Boyadzhiev (1995:table 4), the Late Eneolithic period in eastern Bulgaria lasted until the end of the fifth millennium cal BC, leaving a long period of time – perhaps 20 generations – during which ‘Late Eneolithic’ material culture continued to be made, exchanged and consumed elsewhere. It is likely that the caesura in burial tradition at Varna I signalled the diminution of the supra-regional enchainment network underpinning the provision of elite goods. The demand for such quantities of exotic goods may have declined with the cessation of burials at cemeteries such as Varna. Nonetheless, objects continued to be moved from region to region in some quantity (Gale et al. 2000; Pernicka et al. 1993, 1997), suggesting the long-term survival of the network.

Two trajectories could be sketched in as divergent responses to such tensions. In the first, the values of the hierarchical basis of patronage were successfully challenged by clients still trying to maintain the fractal side of personhood. This would have meant an emphasis on enchainment relations that supported complex, cross-cutting principles of personhood; it is the picture that can be seen in the categorical analysis of Final Copper Age ceramics from Dolnoslav tell (Chapman and Gaydarska 2006). The resultant decrease in complexity stemmed from the weakening of those hierarchical relations that had become an important way of maintaining social cohesion. These changes led to the increasing importance of fractal aspects of personhood as symbolized by fragmentation practices and enchainment processes. In the second trajectory, hierarchical relations become more dominant than before, leading to a decline in social complexity through a further weakening of fractal relations and also signalled by the declining importance of cross-cutting modes of social categorization. These two proposals provide signposts along a road leading to further research into the end of Climax Copper Age societies.

CONCLUSION

The Varna I cemetery has stood for 35 years as a marker of social complexity and material culture diversification in the Climax Eneolithic of the east Balkans. The lack of full publication of the excavated graves has hindered the attempts of many archaeologists during this period to gain a deeper and wider understanding of the significance of the cemetery in its regional and supra-regional context. Technological analyses (Eluère and Raub 1991), the sourcing of semi-precious stones (Kostov et al. 2004) and copper objects (Gale et al. 2000), and the refitting analyses of the marine shell *Spondylus gaederopus* (Chapman 2004; Chapman and Gaydarska 2006:ch. 7) have added significantly to the plethora of texts at a general level of interpretation. Nonetheless, major gaps still exist in the mortuary data at Varna I. In this chapter, we have sought to address one such gap – the absence of AMS dates for the skeletal material – while using the implications of the dates to link the Varna I cemetery to wider debates about social realities in the Climax Copper Age of the east Balkans.

The group of 14 AMS dates for the Varna I cemetery form a consistent and close group whose Bayesian analysis would indicate the highest probability of a starting date c.4550 cal BC and an end date of c.4450 cal BC. These dates place the cemetery at the very beginning of what has been termed the 'Late Eneolithic', with directly coeval assemblages in other parts of Bulgaria described in terms of 'Middle Eneolithic' material culture. This early date is also surprising in view of the many grave goods deposited at Varna that would be typologically dated to the later part of the Late Eneolithic. The view taken here on these inconsistencies is that the AMS dates form such a tight group that their values are accurate, the implication being that a wide range of typical 'Late Eneolithic' objects were made earliest on the west Pontic coast and later exchanged to communities in other parts of the east Balkans. The total duration of burial practices at Varna I of around 100 years means that there were, on average, three or four burials per annum, with implications for the links between groups of mourners visiting the cemetery fairly regularly. The early end of burials at Varna means that post-Varna use of the vast majority of Late Eneolithic material culture continued for over 500 years.

For preliminary analysis pending full publication, the enormous range of types and quantities of grave goods deposited at Varna can be simplified into three categories of graves: 'lavish', 'rich' and 'poor'. Lavish graves contained large quantities of objects, often in sets, including major concentrations of gold and copper. Rich graves contained fewer objects, ranging from hundreds to rather few. Poor graves are defined as graves with very few or indeed without any grave goods. The argument is that those buried or represented in the lavish graves can be considered as 'great men' *sensu* Godelier (Godelier and Strathern 1991), while the rich graves belonged to 'patrons' and the poor graves to 'clients'. The co-emergence is posited of the Varna I cemetery, as a supra-regional mortuary core with a huge effect on the stimulation of demand for prestige goods, and an exchange network whose enchainment relations provide sufficient quantities of prestige goods (especially metal and shell objects) for the possibility of their adoption as key objects in rites of passage. This critical development leads to the creation of clients among homesteads with no resources to participate in

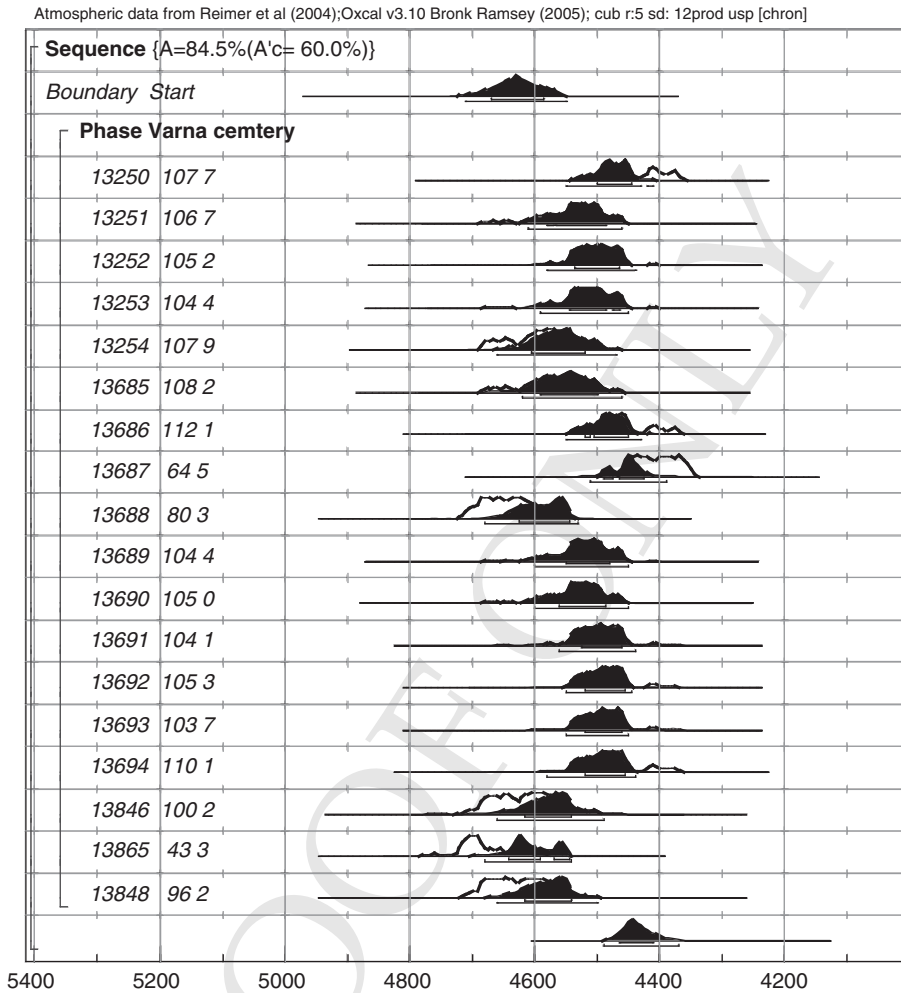


Figure 3. Calibration model for human and animal bone AMS determinations from the Varna I cemetery (with the exception of OxA-1381, see text). The outline distributions show the likelihoods derived only from the calibration of the radiocarbon dates. The solid distribution show the results when the stratigraphic constraints are imposed. The bars underneath the distributions show the 68.2 and 95.4% ranges from the analysis. The likelihoods are modelled as a single phase of activity. The agreement index (84.5%) indicates that there is acceptable agreement from every determination within the model, with the exception of OxA-13865, which produced a low agreement index. One in 20 determinations would be expected statistically to produce a low index. OxA-numbers are shown next to the agreement indices (Table 2).

the exchange network or among similarly resource-poor households on tells, who become debtors in order to acquire key objects for the performance of rites of passage. The patrons who supply scarce prestige goods to the clients continue to exert an

important influence in exchange networks, with greater potential for competition between such patrons. Such 'rich' graves are well attested at other cemeteries in the Late Eneolithic, such as Durankulak, Devnja, Goljamo Delchevo, and Vinitsa. At a higher level of the exchange network are gifts that are exchanged between regional élites, creating a higher level of differentiation. There are large numbers of prestige grave-goods at Varna I related to other parts of the east Balkans; whether stylistic links through gold astragali, linked to northwest West Bulgaria; gold-painting and marble figurines, linked to Central Bulgaria; marble dishes, linked to the Grotta-Pelos group, or copper objects established through lead isotope analysis to eastern Serbia, the Rhodope mountains, and central Bulgaria. These special finds materialize a level of gift-exchange that is represented with greater intensity at Varna than elsewhere in the east Balkans.

In summary, what this article hopes to achieve is a socially nuanced account of the conditions that led to the possibility that Varna could ever have existed. This account relies on the idea of a co-emergence of an expanded mortuary domain with a supra-regional exchange network whose demand was greatly stimulated by the mortuary domain itself. The emergence of persons such as 'great men' was no doubt as much a surprise to the clients of the Varna Lakes settlements as to archaeologists of the 20th-century AD such as the late Ivan Ivanov, who led the excavation of these extraordinary remains. This article is dedicated to his memory.

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NOTES

1. The term 'fractal' refers to the repetition of the same patterns at different scales of a phenomenon (e.g. the relation of part of an object to the whole object is equivalent to the relation between the whole object and a set of such objects [Chapman 2000a]).
2. For details of the AMS dating method see Bronk Ramsay et al. (2004) and Higham et al. (in press).
3. Renfrew defined the term 'superordinate' for grave goods of such strikingly massive difference from 'normal' grave offerings as to suggest an element of hierarchical social practice (Renfrew 1978).

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