

# Mesolithic heritage in early Neolithic burial rituals and personal adornments

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**ABSTRACT** – *Some burial rituals such as cremation or the use of colorants, especially ochre, have old roots in the preceding Mesolithic and even in the Palaeolithic. The evidence for these old rituals is more dense in central or western Europe than in south east Europe, whence most of the new Neolithic ideas came. Among the personal adornments a small amount of snail-shell ornaments, stag tusks, tusks of wild boar and pendants made from antler are of special interest. People wearing these very traditional, old adornments are generally equipped with precious 'new' things such as spondylus, ceramics, adzes etc, and therefore show them as high status people in early Neolithic society.*

**IZVLEČEK** – *Nekateri neolitski pogrebni rituali, povezani s kremacijo in uporabo barvil, posebno okre, imajo star izvor v predhodnem mezolitiku ali celo v paleolitiku. Ti stari rituali so pogostejši v srednji in zahodni kot v jugovzhodni Evropi, od koder je prišla večina novih neolitskih idej. Med osebnim okrasjem je posebej zanimiva mala količina ornamentov iz polžjih hišic, jelenovih deračev, merjaščevih oklov in obeskov, izdelanih iz rogovja. Umrlim, ki večinoma nosijo to zelo tradicionalno, staro okrasje, so v grob pridani tudi dragoceni 'novi' predmeti, narejenimi iz školjke Spondylus, keramične posode, tesla, itd. Ti predmeti jih določajo kot visoko cenjene osebe v zgodnje neolitski družbi.*

**KEY WORDS** – *graveyards; use of ochre; snail-shell adornments; hunting attributes*

## Introduction

Burial rituals are a very traditional matter. Therefore, it looks especially interesting to search for their roots in a preceding period. I know quite well that I am not the first and will not be the last to do this for the early Neolithic and preceding Mesolithic. Therefore, I will reduce my contribution to a few main points, where I think I am able to make new, interesting observations.

Geographically my focal point is central Europe, with a considerable attention given to the evidence of SE Europe, and I shall concentrate on three main topics:

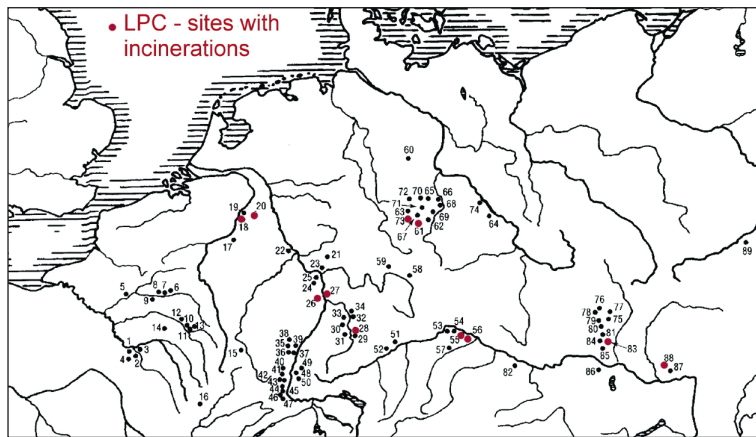
❶ the graveyard phenomenon as an impressive fact of the early Neolithic in central Europe alongside with other sorts of burials inside and at the margins of settlements;

❷ cremations and the use of colorants as funerary rituals, which seem to be based on especially old traditions;

❸ adornments made of small snail-shells and the teeth of wild animals – less known and less spectacular than the *spondylus* ornaments, but extremely interesting.

## The graveyard phenomenon

The synonym for early Neolithic in central Europe is Linear Pottery Culture (LPC). Graveyards are not the only burial sites within this culture, but their considerable number of 53, with over 2000 graves (*Nieszery 1995.28, Abb. 7*) all together is a sufficiently impressive fact to warrant an interest in roots.



**Fig. 1. Linear Pottery Culture – sites with incinerations. Main sites with LPC – graves by Jeunesse 1997. Fig. 5 and catalogue 147–158. Sites with incinerations added as follows: 19 – Geleen/NL, 20 – Niedermerz, 26 – Schwetzingen, 27 – Mannheim-Seckenheim, 28 – Fellbach-Oeffingen, 55 – Aiterhofen-Ödmühle, 56 – Stephansposching, 61 – Arnstadt, 73 – Wandersleben-Gotha/D, 83 – Kleinhadersdorf/A, 88 – Nitra/SK.**

At the moment there is no evidence for them from the beginning. Only one small cemetery with 9 burials in Tesetice, Moravia, was clearly begun during the earliest phase (Phase Ia, after *Tichý 1962; Dočkalova and Košťurík 1996*).

The earliest LPC graveyards are spread all over central Europe, the oldest at Tesetice is situated in the eastern part, as well as two other cemeteries, Vedrovice, also in Moravia (*Podborský et al. 2002*), and Kleinhadersdorf in Lower Austria (*Neugebauer-Maresch 1992*), which were both begun shortly after Tesetice, which means during phase Ib, (after *Tichý 1962*). Sondershausen in Thuringia (*Kahlke 2004*) and Flomborn in the Rhineland (*Richter 1969*) are approximately the same age.

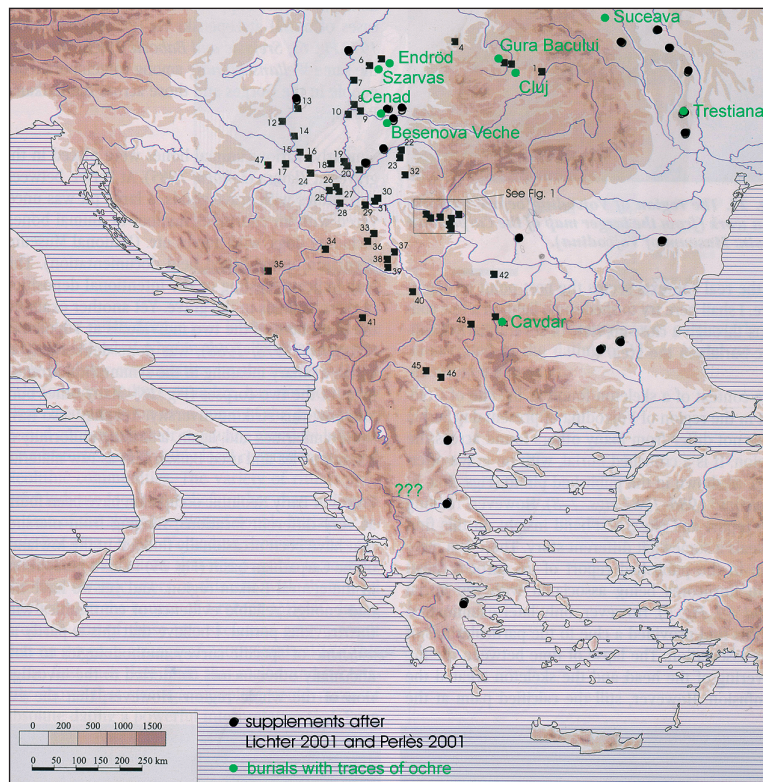
Compared to the central European LPC the number of early Neolithic graveyards in south east Europe is very low. Most of the sites with burials are settlements with intramural burials (*Borić 1999; Lichter 2001. 37 Tab. 1, 180 Tab. 11; Perlès 2001. 273*). These early Neolithic burials are up to 500 years older in the central Balkans, and even more in Greece, than those of central Europe. All new Neolithic ideas entered to central Europe, but the idea of burying

the dead outside the settlement in a special, perhaps sacrosanct site, seems not to have originated in this region.

In Europe the idea of burying the dead in separate areas was a very important innovation of the Mesolithic. There is evidence for Mesolithic graveyards dated before 5500 BC in south east Europe around the Iron Gate, which is where two of the five early Neolithic cemeteries are to be found. Evidence for Mesolithic cemeteries is very poor or even absent in east central Europe (where the eldest Neolithic graveyards are situated (see above) and only known from the north and north east of central Europe (*Grünberg 2000. Abb. 112 A*).

### Burial rituals

The most common position of the deceased in the early Neolithic Linear Pottery Culture (LPC) of central Europe is the flexed position on the left, more seldom on the right side, in cemeteries as well as in



**Fig. 2. Early and Middle Neolithic burial sites in southeastern Europe (based on *Borić 1999. Fig. 24, and Lichter 2001. 40 and 173* (evidence of ochre)).**





**Fig. 3. Linear Pottery Culture – graves with snail shell adornments (Nieszery 1995.Abb. 99, 100).**



settlement burials. The stretched position – more often proven from Mesolithic burials – appears seldom (Kahlke 1954.Abb. 37).

Cremations within the early Neolithic LPC of central Europe are known only in graveyards, and there is evidence for them just since a further developed phase of this culture, which is recently called middle LBK in western Central Europe (Lüning 2005) and 'Notenkopfkeramik' in eastern central Europe (phase II after Tichý 1962). In some cases cremation burials even clearly overlay graves with skeletons. This is the case in the well-known LPC cemetery of Nitra in Slovakia, where 4 of 8 cremation burials clearly were situated above the inhumations (Pavúk 1972. 39 and Plan 1). A very similar situation is to be seen in the Kleinhadersdorf cemetery in Lower Austria (Neugebauer-Maresch and Lenneis 2007/08). In both cases the number of the inhumations greatly exceeds the incinerations which do not attain more than 10 %, while in the Bavarian cemetery of Aiterhofen it increases over 30% (Nieszery 1995.88–90). In other regions such as the Netherlands or Thuringia even over 40 % of the burials within one cemetery may be incinerations, as for example in Elsloo (Modderman 1985.100–101) and Wandersleben (Hoffmann 1989.105).

In total the number of sites where cremation burials of the LPC are proven is quite small (Jeunesse 1997. 57–60; Nieszery 1995. 36 Abb. 9). Only in about a fifth of the cemeteries are there also incinerations, and they seem to be restricted to parts of the LPC territory (Fig. 1). One possible reason for this may be their normally poorer preservation, as they often were dug less deep into the ground.

Evidence for early Neolithic cremation burials from south east Europe is very poor. The most impressive graves that sort surely are the group of 14 incinera-

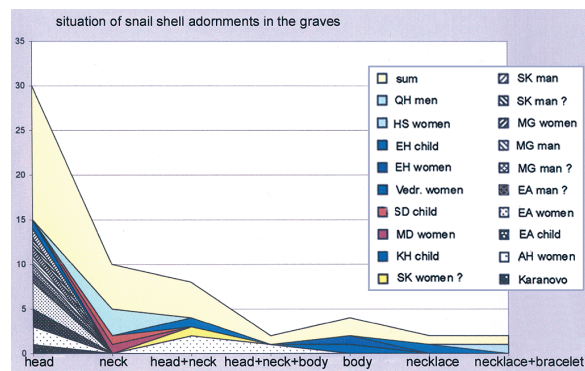
tions at the edge of Soufli Magoula in Greece (Alram-Stern 1996.114; Gallis 1996). In two early Neolithic sites only one lonely cremation burial inside the settlement area is known, up to 3 incinerations from 3 Middle Neolithic sites (Lichter 2001. 377 Tab. 24).

Therefore, the intention to treat death by burning the body seems not to have come from the south-east to central Europe either.

The distribution of Mesolithic cremations shows a big gap in and around central Europe (Grünberg 2000.fig.

45 A), so it does not really clear up the roots of this ritual. The only possible statement may be that the knowledge and custom of burning the dead existed in the preceding Mesolithic of Europe and is even proven from a few Palaeolithic sites, such as, for example, Dolní Vestonice in Moravia (Vlček 1991. 11–12).

Ochre is used within the early Neolithic LPC burials, mainly around the head of the dead. More seldom is ochre spread over the central part of the body. In many graveyards only part of the burials show this ritual; the number is very low in the Bavarian cemeteries (Nieszery 1995.162). In other regions of the big LPC territory such as, for example in Alsace, the use is so frequent that it gives the impression of being a strict custom (Jeunesse 1997.101–102). In sum,



**Fig. 4. Diagram about situation of snail shell adornments in the graves. Sites: QH = Quatzenheim, Alsatia, HS = Hoenheim – Souffleweyersheim, Alsatia, EH = Ensisheim, Alsatia, Vedr. = Vedrovice, 'Za dvorem', Moravia, SD = Saladorf, Austria, MD = Mitterndorf, Austria, KH = Kleinhadersdorf, Austria, SK = Sengkofen, Bavaria, MG = Mangolding, Bavaria, EA = Essenbach – Ammerbreite, Bavaria, AH = Aiterhofen, Ödmühle, Bavaria.**

Site	Grave n°	situation			View to	Anthropology				Cloth/adornments						Grave goods					
		flexed	stretched	orientation		Infrans	Juvenil	female	male	Snail-shells	Spondylus	pearls	comb	ceramics	flint	bone	Grinding stone	Graphit			
BULGARIA	Karanovo grave 13		X	W-O	N			adult										2 needles			
GERMANY	AH	32	R	ONO-WSW	NNW			senil		234	1	4	4								
		33	back	WNW-OSO	SO			adult		3			4								
		60	L	OSO-WNW	S			matur		80	16		1								
		143	L	OSO-WNW	S ?					34	9		5						1+		
		146	L	O-W	S ?			matur		10		3									
		150		OSO-WNW	NNW			senil		96		6									
EA	4	L		ONO-WSW	S					266											
	11	L		O-W	S					142											
	14	L		O-W	S			adult*		1											
	18	L		ONO-WSW	S			adult*		32	37										
	23	L		ONO-WSW	S					X ?	1								2		
	27	L		O-W	S			matur*		217											
	29	L		O-W	S			adult		10	1								6		
Flomb.	7	?		SO-NW	?			?		1	1								1 bone		
MG	5	L		ONO-WSW	S ?			adult ?		1									2		
	6	L		O-W	SW					122		2							3 WS		
	7	L		NO-SW	S ?			adult ?		6									1		
	13	R ?		SO-NW	NO ?			?		x											
SK	18	Back		O-W	S			adult*		25		2							4 WS		
	26	L		O-W	S					48	3								1		
	29	L		O-W	S			adult*		86	1								1 WS		
AUSTRIA	KH. 26	L		SO-NW	S					124											
	MD. 420	L		O-W	S			adult		28		12	1						2 WS		
	RD. 556	?		?	?			?		120	1								2		
	SD. 584	L		NO-SW	SO					79	1	10							2		
CZECHOSLOVAKIA / MORAVIA	Vedr. 9/88	L		SO-NW	S					300	47		506						1		
SUM GRAVES		23	2							8 (18-20)	3 (+4*)	27	12	8	4	5	9	4	3	5	2

**Tab. 1. Early Neolithic graves with small snail shell adornments made from local snail shells – except Karanovo (snail species unknown). Sites: AH = Allerhofen, Odmitzle, Bavaria, EA = Essenbach – Ammerbrette, Bavaria, Flomb. = Flomborn, Germany, KH = Kleinhadersdorf, Austria, MD = Mitterndorf, Austria, MG = Mangolding, Bavaria, RD = Rutzling, Austria, SD = Saladorf, Austria, SK = Sengkofen, Bavaria, Vedr. = Vedrovice, Za dvozem, Moravia, Vedr. S-u-Lesa = Vedrovice, Štírká u Lesa, Moravia, WS = sherd of body.**



the ritual of covering the dead or part of them with ochre or red chalk seems to be a custom of regionally variable importance within the early Neolithic burials of central Europe and not linked with sex or age or the abundance or lack of grave goods.

In southeastern Europe the use of ochre mainly is proven from the northeastern region around the Carpathians (Fig. 2 based on *Lichter 2001.40 and 173*). As far as I know there is no evidence from Greece or the Near East.

The use of ochre for funerary rituals is well proven from European Mesolithic burials, where whole bodies were often covered with ochre, as it was the custom in younger Palaeolithic burials yet (*Grünberg 2000.220*).

Summing up the indications of some grave rituals of the early Neolithic, we can see that they show in large part traditions surviving from preceding periods, and in the case of the cremation burials and the use of ochre, these traditions should even be more based in the western and central parts of Europe than in the south east, where all the new ideas of the Neolithic way of life came from.

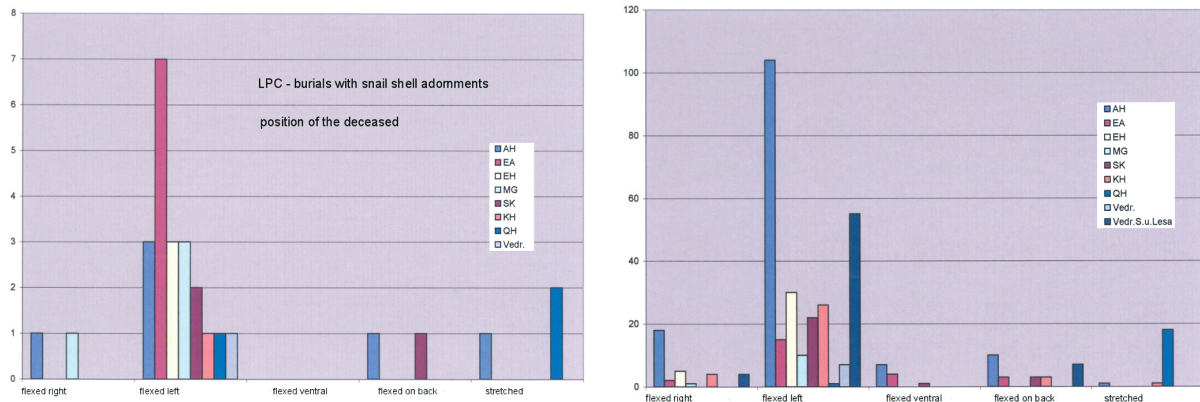
### Personal ornaments

The best-known ornaments in early Neolithic graves in central Europe are those of the marine *spondylus* shell, imported from the Aegean, or to a lesser extent from the Adriatic coast. These ornaments are clearly connected to the richest burials and must have been of extremely high value. They are the most important evidence of long-distance connections through Europe in early to middle Neolithic times (*Seférides 1995; Müller 1997; Kalicz and Szénászkzy 2001*).

In a small number, in 39 of more than 2500 nearly Neolithic graves in central Europe we find ornaments made of small snail shells of only a few species. About 50 % of these graves are those of women and equal 25 % those of men and child-

Site Grave n°	situation				Anthropology				Cloth / adornments				Grave goods				
	flexed	stretched	orientation	View to	Infans	Juvenil	femal	male	Snail-shells	Spondylus	pearls stone	Shell of mussel	ceramic	flint	bone	adze	other
FRANCE																	
Chichery, Grab 2		X ?	S-N	O			matur		3			1					
Cuiry G. 1		ventral			II				10 X	X		3					
EH 6	L		NO-SW	O	II		adult		>10								
EH 13	L		NO-SW	O	II				48	1		1			1 Idol		
EH 14	L		W-O	N	II				18	1 stag tusk							
Frignicourt							?		817	80	1 bra-celet				1 chisel		
HS 26					III				4					2		1	1 Pyrit
HS 39		X	SO-NW				adult		69								
S	L		O-W					adult	1								
QH 5		X	NW-SO	?				adult*	9				13 WS	1		1	1 Ochre
QH 6	L		NW-SO	?		13-15			13				2 WS	1	1	1	1 + 4 ochres
QH 7		X	?	?				adult*	14				1 WS	9	1	1	1
Wettolsheim, o							matur		5	>100		2					
SUM					4	1	4		13	2		4	3	4	4	4	4
GRAVES	5	5															

Tab. 2. Early Neolithic graves with small snail shell adornments mainly made from marine snail shells. Sites: Cuiry = Cuiry – les-Chaudardes, France, EH = Ensisheim, Alsatia, HS = Hoenheim – Souffleweyersheim, Alsatia, QH = Quatzenheim, Alsatia, Wettolsheim = Wettolsheim, Alsatia.

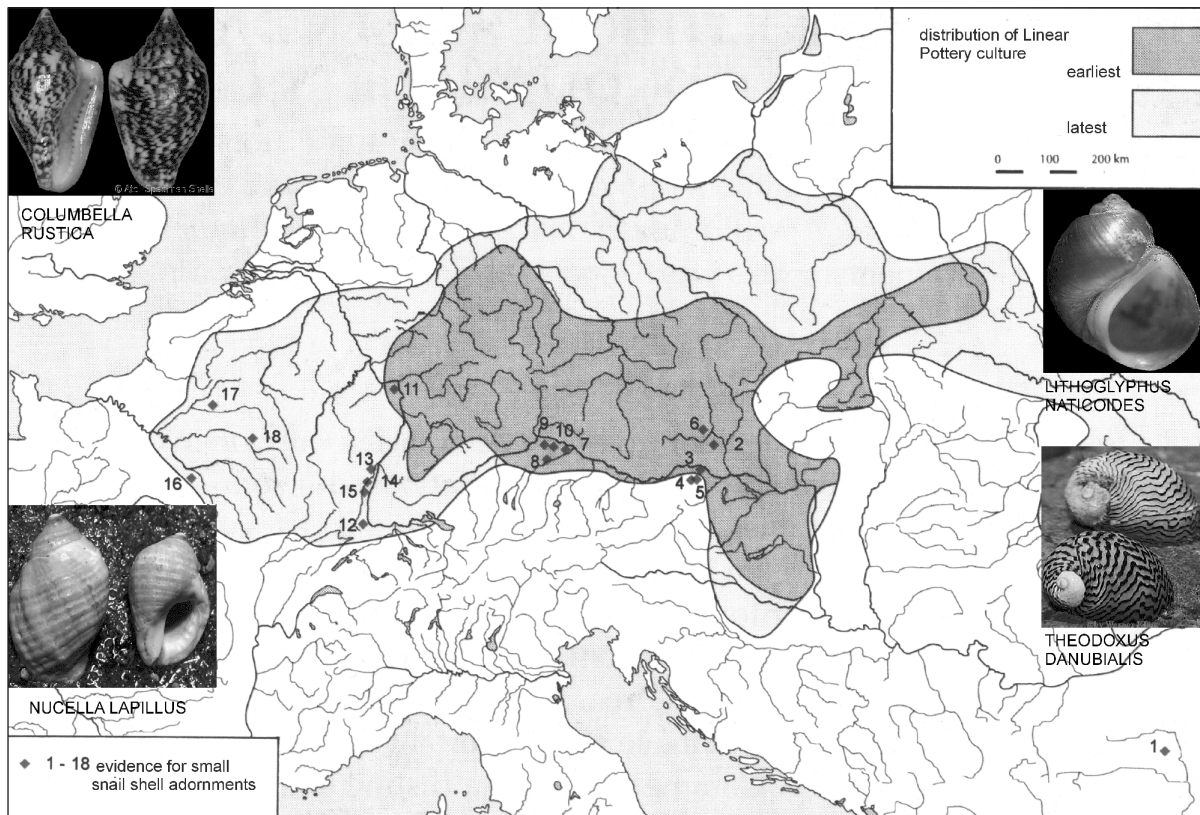


**Fig. 5. Position of the deceased: left) burials with snail shell adornments; right) burials without snail shells. Sites: AH = Aiterhofen, Ödmühle, Bavaria, EA = Essenbach – Ammerbreite, Bavaria, EH = Ensisheim, Alsatia, MG = Mangolding, Bavaria, SK = Sengkofen, Bavaria, KH = Kleinhadersdorf, Austria, QH = Quatzenheim, Alsatia, Vedr. = Vedrovice, ‘Za dvorem’, Moravia, Vedr.S.u.Lesa = Vedrovice, ‘Široká u lesa’ Moravia.**

ren (for more details see *Lenneis 2006*). Most of the snail shell ornaments are found on the head (e.g. in Aiterhofen, Fig. 3), around the neck, over both and/or around the body (Fig. 4). They might have been sown on bonnets or heads, or on cloth as was recently proven for the supposed bonnet of a baby at the Kleinhadersdorf cemetery (grave Verf. 26 – *Hartzhauser et al. 2007*). Only in France are there

situations suggesting necklaces, or necklaces and bracelets (*Gallay and Mathieu 1988; Jeunesse and Schnitzler 1993*).

Persons equipped with these snail shells are usually buried in the flexed position on the left side, much more seldom on the right and a few stretched on their back. The frequencies of these positions are



**Fig. 6. Early Neolithic graves in Central Europe with snail shell adornments (map based on *Jeunesse 1997*.fig. 1). 1 – Karanovo/BG; 2 – Kleinhadersdorf, 3 – Mitterndorf, 4 – Ratzersdorf, 5 – Saladorf/A; 6 – Vedrovice/CS; 7 – Aiterhofen, 8 – Essenbach, 9 – Mangolding, 10 – Sengkofen, 11 – Flomborn/D; 12 – Ensisheim, 13 – Hoenheim, 14 – Quatzenheim, 15 – Wettolsheim, 16 – Chichery, 17 – Cuiry les Chaudardes, 18 – Frignicourt/F.**



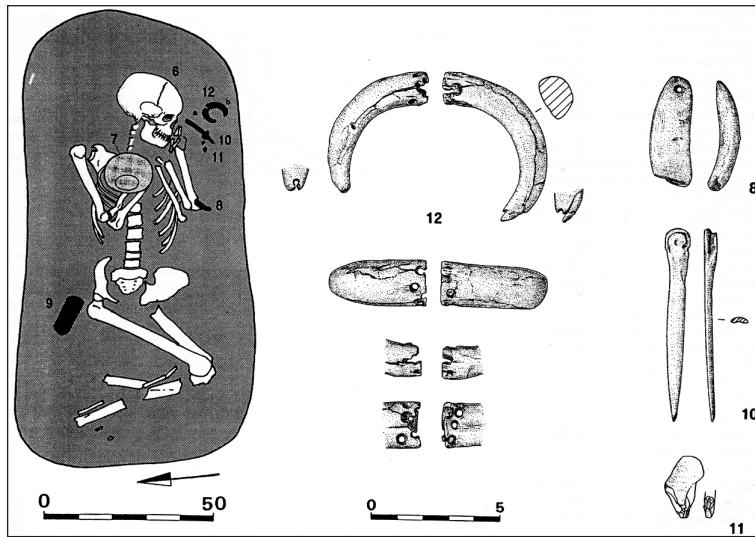


Fig. 7. *Kleinhadernsdorf/Austria, grave 81* (Neugebauer-Maresch 1992.Abb. 8). 6 - layer of ochre, 7 - ceramic pot, 8 - spondylus, 9 - adze, 10 - bone awl, 11 - flint, 12 - pair of tusks of wild boar.

very like the other LPC graves without these ornaments (Figs. 5a and 5b). Most of the stretched inhumations are known from the Alsatian site of Quatzenheim (Jeunesse 2005).

As can be seen in Tables 1 and 2, burials with snail shell adornments were mainly richly equipped with other ornaments and grave goods. A remarkable fact is the very high evidence of *spondylus* within them. As seen in Table 1, 50 % of these 22 graves from eastern central Europe also contained *spondylus* ornaments. Adding to them the graves of the Rhineland and France (Tab. 2) the portion goes down to 41 %, which anyway represents a multiple value of the LPC average of 10-5 % (in Bavaria up to 27 %) of the graves containing *spondylus* ornaments (Nieszery 1995. 175).

In the Rhineland and west of it (Fig. 6/no. 11-17) small marine shells, such as *columbella rustica*, *nucella lapillus* and others, had been used (Jeunesse 1997.72; Bonnardin 2000.56). From Bavaria eastwards (Fig. 6/no. 2-10) only shells of species living at the shores of brooklets were used, such as *theodoxus danubialis* and the very similar *lithoglyphus naticoides* (Brink-Kloke 1990. 440-441; Nieszery 1995.191; Podborský et al. 2002.263; Hartzhauser et al. 2007).

It is most astonishing that there is no evidence for these ornaments from the large and rich Thuringian cemeteries, or from Slovakia.

From south east Europe the only evidence comes from layer II in the north east section of the tell of Karanovo (Fig. 6/no. 1), where a woman in a stretched position had 7 small snail shells around her head, further equipped with 2 bone needles (Bačvarov 2003.47-48 and fig. 2.5).

Snail shell ornaments were quite common in the Mesolithic of central and western Europe (Grünberg 2000.fig. 65); in the south east they are only proven from the Iron Gates (Borić 2006.9-10, 13), but there are

also several examples of these ornaments from the upper Palaeolithic, such as from the Hundsteig site in Krems, Austria (Neugebauer-Maresch 1993.78; Probst 1991.foto p. 133). One gets the impression that in Europe these ornaments are very traditional such as ornaments made of the teeth of wild animals. There is rather unique evidence for a pair of tusks of wild boar from a men's burial at the Kleinhadernsdorf cemetery in Austria (Fig. 7) (Neugebauer-Maresch 1992.Abb. 8). This man had some ochre over his head too, but also ceramics, *spondylus*, and an adze. There is further evidence of ornaments made

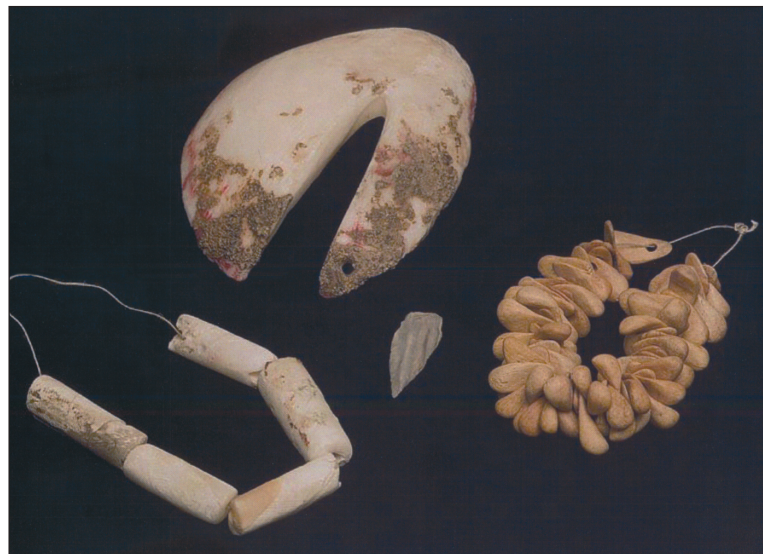


Fig. 8. *Rutting/Austria, grave 13* (Kloiber and Kneidinger 1970. Textabb. 2; Kloiber and Kneidinger 1968.Tafel IV/3; Binsteiner 2006.40 Abb. 5). Grave of an adult man with and adze, spondylus adornments, 1 arrow-head and blades of Bavarian flint as well as 120 imitations of stag tusks.



of stag teeth, for example in a men's grave at Vedrovice in Moravia, with two pairs of stag teeth beside rich, very Neolithic equipment (*Podborský et al. 2002. grave n° 15/75. 264, obr. 15 a, b and tab. XVI*). Another man from the Austrian site of Rutzing had a luxurious outfit of *spondylus*, but a double necklace of imitation stag teeth beside a large adze and arrow heads (Fig. 8) (*Kloiber-Kneidinger 1970. Textabb. 2; Binsteiner 2006. Abb. 5*). The largest quantity, of 31 stag teeth, comes from a male burial in Sondershausen, Thuringia, which also contained a large *spondylus* set (*Kahlke 2004. grave SO 32 on table 12*). In the Bruchstedt cemetery, again in Thuringia, even a small child (infans I) had been given these very typical hunter attributes (*Kahlke 2004. grave RB 30 on table 25*).

Other ornaments typical of hunters are decorated pendants made from antler, such as are known from the Bavarian cemeteries of Aiterhofen, grave 158,

and Sengkofen, grave 19 (*Nieszery 1995. 196, Taf. 55/2 and 69/6*), but also these persons have Neolithic equipment such as adzes or even ceramic pots beside their hunting arms.

## Conclusions

I have tried to show within the grave rituals and adornments of the dead some traditions which apparently survived from preceding periods, a few even indicating very old roots in central and western Europe. As traditions can not survive without people, these facts clearly indicate the survival of some of the autochthonous population. To me the most striking observation concerning these persons was that although their numbers might have been small, the way most of them were treated shows them as integrated and highly esteemed people in early Neolithic society.

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