

Outline of a Neolithic framework for the twenty-first century (I. Pavlů)

1. We can understand the neolithic age as the result of a long-term process participated in by **populations of different origin** over the whole of Europe.
2. In Europe we can distinguish **two basic trends** of spreading neolithic changes: The Mediterranean coastal stream along the axis Aegean sea – west coast of the Atlantic and the continental stream along the axis Aegean – Danube area – Rhineland in the west. Both are documented by a series of radiocarbon dates. A map with the average gradient in a diagonal SE-NW direction has been created for this second axis through an analysis of the main components from the genetic frequency data of European populations (Menozzi et al. 1978; Cavalli-Sforza 2003, 303).
3. The share of the populations taking part in the neolithisation changed over time and space. **Palaeogenetic DNA analyses** have produced new arguments at cell level. The combination of three independent genetic systems shows an identical 22% share in the spread of the oldest agriculturists in Europe (Cavalli-Sforza 2003, 306), whereby the intervention was greater in the South of Europe than in the North.
4. Genetic analyses thus indicate a share of up to 80% domestic population in some areas. According to the **DNA Y-chromosome** (transmitted by the male population) the share of incoming men outweighed the domestic women (according to **mitochondrial DNA** transmitted by the X-chromosome in the female population). Movements and population mixing occurred on various levels including small regions, as cemetery analyses in Vedrovice have shown.
5. The share of the resident population is not always unambiguously archaeologically provable. There is a lack of archaeological documentation at numerous places, usually for the presumed **contact period** between the youngest mesolithic and the oldest neolithic (amongst others in Northern Italy, the Danube area, the Northern Tisa area, Northern Bohemia in detail and others).
6. Thus we repeatedly observe the **phenomenon of a transitional vacuum**, which has been so far taken as obvious proof for the invasion of regions which had become depopulated in the later mesolithic by foreign, genetically completely different, colonists.
7. In fully neolithic artefactual complexes the original artefacts are only rarely and partially preserved. Therefore the problem cannot be solved by the typological comparison of well documented finds from the high boreal mesolithic and the high neolithic from the classic linear pottery period falling within the preceding Atlantic. Both show obvious **differences mainly in the content of their chipped industries** (Svoboda 2003, 96).
8. Archaeologically it is on the contrary especially important to search for answers in the transitional vacuum period, either **theoretically or on the basis of persisting traces** in the oldest neolithic within the territory of our country at the beginning of and during the oldest linear pottery culture period.
9. Here and especially in the neighbouring areas of assumed linear pottery genesis in Transdanubia this is a matter of several critical centuries at the beginning and in the first half of the 6th millennium BC. Theoretically we cannot rule out that it was just at this time that the **archaeologically invisible** original contacts between different populations and cultures took place. This resulted in the later, already familiar, picture of the early neolithic period during the middle of the 6th millennium BC.

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10. The **contact model** could take on different forms (Lukeš – Zvelebil 2004).

11. **Theoretically we explain** the phenomenon of the transitional vacuum as a period of archaeologically so far undetectable contacts, during which part of the resident population intellectually transformed the ideology of the incoming farmers into social-economic units of the new type. The mobile social units settled down in small incipient homesteads.

During this period the transition from the old dwelling types should also have taken place. These dwellings can be assumed to have been pit houses or surface houses, tending to have been round, thoroughly simple buildings. Initially the new rectangular houses could have had a construction with a single line of supporting poles of the Kris-type (Tiszajeno), which is recalled at a much later date by the building from Stvolínky. The typical solid early neolithic architecture with sidelong rails and already three rows of supporting poles has its oldest precursor in Southern Transdanubia (Pityérdomb).

12. Traces of this older theoretical development can be observed at the beginning of the oldest linear pottery culture. Its elements include e.g. the location and size of the settlements, the hunters' equipment in the burials – Schwanfeld and Vedrovice, and especially the **style of the pottery**, which had an **isochrestic character** for quite a long period.

13. The mixed population would have had to have shown itself in the elements of the **neolithic social organisation** in particular. The Neolithic did not represent a simple transition from an egalitarian to a hierarchical society. For a long time in the Near East traces of egalitarian and hierarchical societies alternated parallel to each other without a tendency of the hierarchical society to quickly predominate (Kuijt 2000, 313). On the linear pottery settlement in Bylany large houses with a doubtless important social role occur only during stages where the settlement extends beyond a certain size.

14. Therefore we cannot talk of an acculturation of the resident population in the course of the oldest linear pottery culture, but rather of the building of a **mixed society**. In such a setting the older elements moved into the background, but for a long time they did not disappear completely in exchange for the new. Therefore they could latently survive for a long time in already neolithised homesteads. They could be reactivated in socially and economically instable periods.

15. The transition period from the oldest linear pottery with isochrestic decoration to the classic linear pottery groups with a prevailing emblematic style is obviously a result of the constant **population flow from** neolithised South Eastern Europe (strong linear styles-Vinča).

16. The end of the classic linear pottery and the rise of stroke-ornamented ware could have been caused, amongst other things, by changes of climate and the transition to a warmer and drier period. This could consequently have led to a **shortage of local support sources**, which is demonstrated by a certain instability within the later linear ceramic culture distribution area. Evidence of this could be the occupation of strategically high situated locations in the Šárka period, or also rare examples of violent conflicts. The sources from the Carpathian Basin which had till then replenished the neolithic population component were held up by changes there which shortly afterwards led to the birth of the Lengyel culture.

17. During the period before the genesis of the new ceramic complex in Central Europe in a couple of regions the **phenomenon of the transitional vacuum** sort of repeats itself, which cannot everywhere be explained by the survival of the Šárka stage.

18. The new groups with stroke-ornamented pottery return to a decorative style with **isochrestic character**. In the Czech Lands the decoration technique of stamped rows of strokes is new although

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it had of course already occurred in the basic form of simple strokes in the westernmost region (e. g. La Hoguette) during the oldest linear pottery period. After several hundred years locations are again being used, which had at one time served the pre-neolithic population for mobile use (Northern Bohemia, in the sandstone eaves).

19. The newly constituted later neolithic homesteads distinguished themselves not only by a significantly more varied house architecture, but mainly by a short-term attempt at a trans-regional social organisation. This finds expression in **round rondels** as a new type of socio-sacral architecture.

20. Domestic development headed towards the forming of an already fully interconnected neolithic population, which showed itself in the second half of the 5th millennium BC. The individual categories of artefact link together in different ways throughout Central Europe, where we also observe a substantial specialisation in the distribution of raw materials. On the other hand the uniform character of the domestic development of the original **stroke-ornamented ceramic** ceases. Corroboration of this can be the great heterogeneity of settlements or the disintegration of the pottery morphology.