

### III. Research History. Future Strategics

#### **Lithuania and Western Norway in the Neolithic period: Research goals derived from a comparative presentation of two “marginal” regions in Neolithic Europe**

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##### **Introduction**

Are there any relevant, and perhaps even important, common approaches to the Neolithic period in two regions as distant and different as Lithuania and Western Norway? Being a Bergen archaeologist occupied with Neolithic studies, this is an obvious question to ask given the prospect of future research cooperation with Lithuanian Stone Age archaeologists. The following is an attempt to define some goals of possible mutual interest above the general level of methods. Given the situation of distance and difference, it is my opinion that our common approaches should have a broad European perspective in which contrasts and similarities hopefully will contribute to a better understanding of the dynamics of cultures and developments in Neolithic Europe. On the basis of a brief comparative presentation of adaptational conditions, archaeological sources, material cultures and cultural chronologies in the two regions, this perspective will be structured within a simplified northern European frame, where the Funnel Beaker and the Corded Ware/Battle axe cultures are specifically addressed as potentially important common research goals.

## Comparing contrasts

When comparing the Lithuanian and Western Norwegian Neolithic one has to consider the different ecological backgrounds, conditions of preservation, material culture and research traditions.

Perhaps the most significant contrast is expressed in the landscapes and adaptational conditions. It is evident from purely geo-topographical considerations that the Lithuanian "inland" type of flat forest/lake/riverine landscape and the Western Norwegian "coastal" type of island/fjord/mountain landscape represent totally different ecological settings for human adaptation in the Neolithic as well as in other prehistoric periods. In consequence, it is also obvious that the dissimilarities in the Neolithic archaeological records of Lithuania and Western Norway are to a certain extent different cultural products of ecologically dependent differences in subsistence strategies. It is difficult to characterize these adaptational differences briefly. From the information I have accessed it is in this context of comparison probably correct to describe the Lithuanian Neolithic on a very general level as a period characterized by coast/inland hunter-gatherers with wide-ranged terrestrially oriented subsistence strategies, and the long phase of pre-farming Western Norwegian Neolithic as a period characterized by coastal hunter-gatherers with marine-oriented subsistence strategies.

A comparison is also biased by different geologies and research traditions producing unequal representation of archaeological sources. The Lithuanian coastal plain and inner hummocky zone glacial/fluviol glacial geology with fine sandy/silty soils and ancient lake/lagoon peat basins have favoured the preservation of organic remains related to Neolithic activity. The Lithuanian Neolithic is thus represented by a wide-range of archaeological sources, including wooden tools and structures, some well preserved faunal bone assemblages and, not least, human skeletons, the last of which allow for the identification and investigation of graves, cemeteries, burial customs and anthropomorphic features (Rimantienė 1991; 1992a). Preservation conditions are significantly poorer in Western Norway with its rugged archipelago, fjord and mountain landscape, where consolidated sandy soils are extremely limited and old peat basins rare in the Neolithic settlement areas (blanket bogs are common, but these are usually of post-Neolithic age). The documentation of unburned faunal assemblages is restricted to two rock shelters. The rock shelter excavations have also revealed a few human skeletons buried in the middens, supposedly of Mesolithic age (Bruen Olsen 1992). Since the Neolithic settlements are generally located in open exposed areas with poor conditions for organic material, the study of this period suffers from an absence of complete habitation site faunal assemblages as well as human skeletal remains. Further, the decomposition of unburned bones makes it difficult to identify grave features. Contexts with preserved wooden material are totally lacking to date.

In spite of the generally good preservation conditions in Lithuania, the archaeological record of the Lithuanian Neolithic still seems limited in terms of spatial and chronological representation, primarily as a consequence of the limited resources available for survey and excavation. Western Norwegian Stone Age archaeology, on the other hand, has during the last twenty years been favoured with substantial economic resources applied to large rescue projects in the core area settlements at the coast, and also on the inland mountain plateau, which

was seasonally exploited for reindeer hunting throughout the Stone Age. By means of systematic surveys, thorough, most often interdisciplinary excavations and extensive use of radiocarbon dates it has been possible to reconstruct a chronologically controlled framework for the pre-farming Neolithic, with good representation at the levels of typology and site distribution. The representativity of these categories makes this framework a powerful tool in any study of hunter-gatherer socio-economic continuity and change in the Western Norwegian Neolithic. Due to these different circumstances one may say that the Lithuanian Neolithic is rich in quality, but rather poor in quantity, whereas the Western Norwegian Neolithic is rich in quantity, but rather poor in quality. Norwegian archaeologists can derive new ideas from studying your contexts of functional and spatial relationships between stone artefacts and organic features. Lithuanian archaeologists have perhaps something to learn from our experience in designing and conducting research methods and strategies aimed at reconstructing inter-site subsistence and settlement patterns.

With regard to material culture, I have not observed artefact types reflecting direct contact links in the Neolithic, although there are some common features in the presence of the Corded Ware/Battle Axe culture in both regions, primarily in the form of boat shaped axes. From Western Norway it actually appears easier to detect typological parallels which may relate to a west – east cross-regional contact sphere in the material cultures of the Finnish – Estonian areas (Hinsch 1956).

Briefly, the material culture of the Western Norwegian early/middle Neolithic hunter-fisher society is characterized by slate technology, non-flint blade techniques, short and square basalt adzes and locally produced cord stamp decorated pottery of funnel beaker shape. Genuine early Neolithic Funnel Beaker Culture pottery is also present, demonstrating contacts between western hunter-fishers and Eastern Norwegian, and may be also Danish, agricultural groups. This predominantly local type of inventory, which in our Late Neolithic period (2200-1600 BC) is replaced by the Southern Scandinavian type of Neolithic material culture, has an autonomous and regionally homogeneous character.

The material cultural homogeneity of Western Norway constitutes yet another contrast to the Lithuanian Neolithic, in that Lithuania seems to have a rather complex distributional and chronological variety of artefact types and pottery styles. I will not even try to give a description of this variety here, but simply state that it is ascribed to the existence of at least six cultural groups, of which the northern Narva Culture and the southern Nemunas Culture constitute the core traditions in the Lithuanian region through the Early/Middle Neolithic. During the latter part of the Middle Neolithic, these local hunter-gatherer cultural traditions are influenced by the northern expansion of the Pitted/Comb Ware hunter-gatherer culture and the progressively southward expanding Neolithic Globular Amphora and Corded Ware/Battle Axe cultures. This led to the development of the late Neolithic Bay Coast Culture in the east Baltic, a semi-Neolithic cultural form strongly associated with the genesis of the Balts (Rimantienė 1992b; 1994).

Even though the Western Norwegian/Lithuanian contrast between uniformity and variety relates somehow to Lithuania's geographical location closer to the scenario of important culture-historical events in Neolithic Europe, this contrast is probably also to a certain degree amplified by different research directions and goals. In Lithuania, Stone Age archaeologists have been geared towards

sorting artefacts according to pre-defined archaeological units of assumed ethnic-cultural significance, an approach which may easily mask real integrated patterns of cultural homogeneity. The Neolithic studies in Western Norwegian archaeology tend to focus on adaptational models and subsistence-settlement patterns. This may again camouflage real cultural variation. In my opinion, neither of these directions are necessarily better or should be understood as more important for future Lithuanian/Western Norwegian Neolithic archaeology. It is perhaps time for new thinking, for instance by focusing more on culture from the social and ideological points of view. This direction should be pursued by developing and testing holistic models where settlement patterns as well as cultural unit tools are continually explored and interpreted in a framework which integrates all aspects of the available empirical material, ranging from pottery styles to palynological subsistence data.

### Similarities visualized in a broad geographical perspective

Despite the contrasting realities of our Neolithic archaeologies, it is in fact possible to detect certain general similarities with a potential for defining collaborative research goals, particularly regarding the way in which the populations in these regions related to the emergence of agriculture. This can be shown by simply comparing the culture-historical developments of the two regions, which demonstrate that Lithuania and Western Norway were the domains of local hunter-gatherer populations during most of the Neolithic period (Fig. 1). This parallelism connects Lithuania and Western Norway within the same sphere of transition to farming, a sphere visualized spatially on the map (Fig. 2) showing the three main zones of Neolithic expansion in Northern Europe. Zone 1 marks the northern frontier of the earliest farming expansion into the central and Northern European loess areas by colonising Linear Band Pottery Culture groups. This frontier was reached approximately 5000 BC, and remained thereafter static for almost thousand years (Keeley 1992). Zone 2 marks the next expansion wave at about 4000 BC,

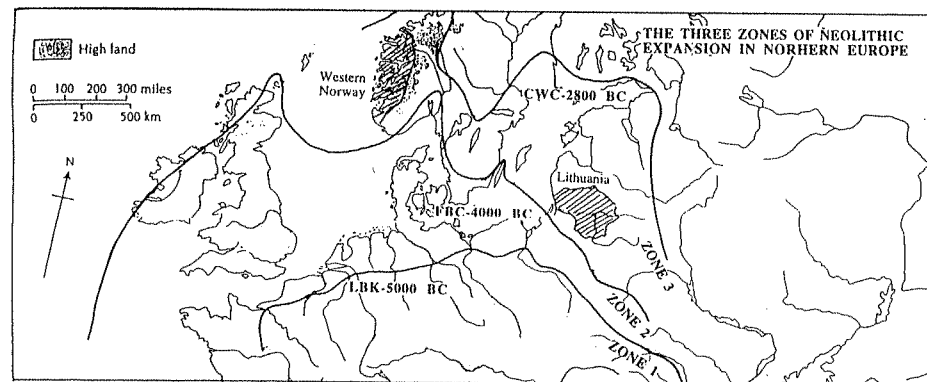


Fig. 1. The three zones of Neolithic expansion in northern Europe (Based on Keeley 1992, Whittle 1994 and Kristiansen 1989).

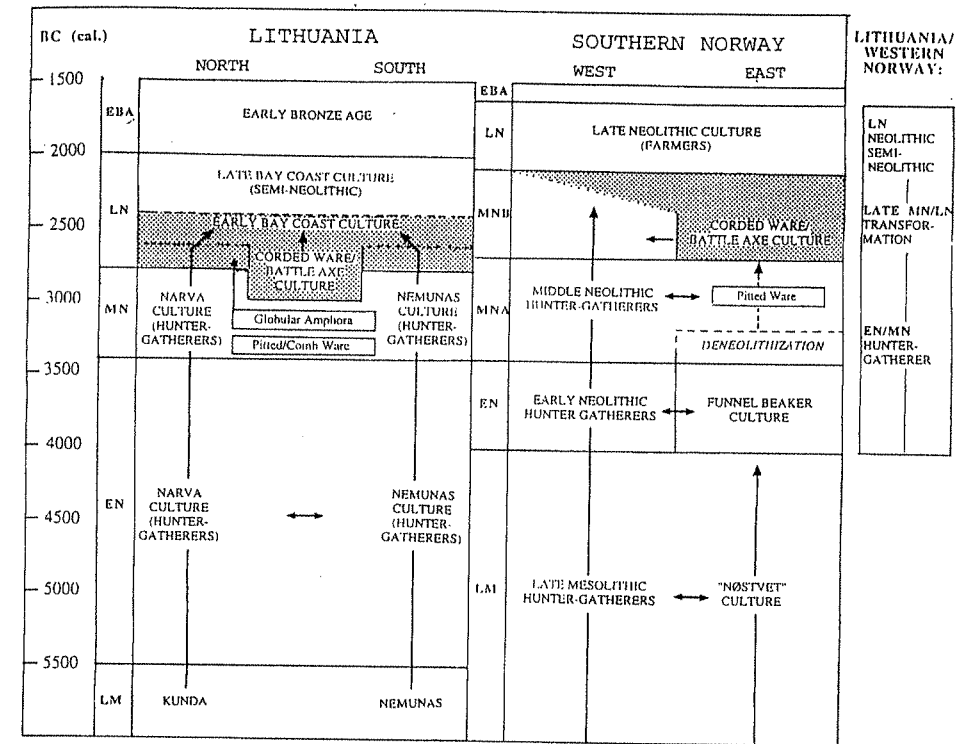


Fig. 2. Culture-chronological frameworks for Lithuania and Western Norway (Lithuania based on Rimaitiene 1992b and 1994. Eastern Norway based on Hinsch 1955, 1956, Østmo 1988 and Bruen Olsen 1992. Western Norway based on Nærøy 1987, 1993 and Bruen Olsen 1992).

generally interpreted as a process of rapid ideological and social transformation of the northern European Atlantic facade coastal hunter-fisher-gatherer communities (Thomas 1988; Sherratt 1990; Gebauer & Price 1992; Bradley 1993). The zone 2 neolithisation created the megalithic cultural groups, in Southern Scandinavia and North-eastern Europe represented by the Funnel Beaker Culture. The Funnel Beaker Culture expansion also reached a certain northern limit (Whittle 1994). This was relatively stable for more than one thousand years. (Some fluctuations along the Scandinavian frontier were possibly related to a climatic regression at the EN/MN transition, cf. Berglund 1985). Zone 3 marks the last significant stage of Neolithic farming expansion dated to around 2800 BC (Kristiansen 1989). This expansion is commonly related to the spread of the Corded Ware Culture both inside and outside the areas of the Funnel Beaker Culture, and is interpreted by many archaeologists primarily as a migration process.

Such a broad scope reveals the similar situation of Lithuania and Western Norway as territories where Early/Middle Neolithic hunter-gatherers existed for more than a thousand years in the neighbourhood of, and probably also periodically in close contact with, Funnel Beaker farming groups. This situation seems to have remained generally unchanged until the appearance of the Corded Ware Culture.

## **Towards the Funnel Beaker and Corded Ware cultures as possible collaborative research goals**

This similarity leads on to the following questions of mutual relevance: First, why did these populations resist, or alternatively, why were they excluded from, Funnel Beaker Culture neolithisation? Second, why and how were they transformed in the context of Corded Ware culture expansion?

These questions are of course of local importance, but derived from parallel developments in our distant regions they have collaborative significance if they are primarily dealt with in a non-local perspective focusing on the *European* Funnel Beaker Culture and the *European* Corded Ware Culture as main research goals. The Funnel Beaker and Corded Ware Culture are heavily debated phenomena in European archaeology, evidently because they are so tied up with the important general theme of the transition to farming in northern Europe. However, this debate is biased by a core area approach that has ignored examination of how these cultures operated as developed ideological and socio-economic systems in their marginal spheres of contact, interaction and integration with hunter-gatherer populations. Such a marginal sphere approach will probably provide a better understanding of the nature and dynamics of the Funnel Beaker and Corded Ware cultures, and thereby also a better understanding of the processes of the transition to farming. If we agree on this, then a research focus directed at the Lithuanian and Western Norwegian Neolithic as marginal spheres in this broad context can bring about important contributions to the crucial questions debated in European Neolithic archaeology.

My concern at this stage of contrasting and comparing is simply to point out a possible direction of research co-operation. The above proposed direction will thus not be evaluated further in terms of defining specific problems and strategies. However, I will try to elucidate why I mean that the marginal sphere approach is important by briefly comparing the appearances of the Corded Ware Culture in Southern Scandinavia, Lithuania and western Norway, focusing here on the migration hypothesis.

### **A center/periphery evaluation of the Corded Ware/Battle Axe Culture elucidating the importance of the marginal sphere approach.**

First I will present a short review of the general context of this culture. The Corded Ware Culture covers a geographically wide complex of several inter-related local groups, representing different branches radiating from an assumed eastern or central European origin, defined within the so-called Corded Ware A Horizon, or the "gemeineuropäische Horizont". In the Scandinavian-Baltic area, the subgroups appear as the Danish Single Grave Culture, the Swedish-Norwegian Battle Axe Culture and the Finnish-Baltic Boat Axe Culture (Hinsch 1956; Malmer 1975; Kristiansen 1989). Since these local variants are of minor importance in this connection, I hereafter use the short term CWC culture as a common denominator.

Wherever the CWC culture is recognized and debated it is usually viewed as a result of a rapid, large scale expansion based on migration or diffusion. It is also commonly identified with the spread of the indoeuropean linguistic system,

and thus associated with the indoeuropean expansion. The CWC expansion is manifested archaeologically by sudden observed changes in settlement types, patterns of land utilisation, burial customs and material cultural symbols expressed for instance in axe forms and pottery styles. These changes are generally interpreted as being related to a new structure based economically on extensive pastoral farming and secondary products consumption, ideologically and socially on a system in which individuality, hierarchy, conflict and warfare played an important role compared to the structures that were replaced (Childe 1950, Sherratt 1981; Larsson 1988, 1991; Kristiansen 1989). The expansion of the CWC culture is often either explicitly or implicitly seen as a process where the pre-existing cultures were deprived of their identity by full integration or by extinction resulting from warfare.

Migration has for many years been the most discussed topic in the rather polarized debates about the CWC culture. Well known exponents of the migration view are Gordon Childe (1950) and Maria Gimbutas (1980). The New Archaeology of the 1970's and the early 1980's rejected migration as an explanatory concept for change, and explained the CWC culture in terms of the adoption of a new ideology in response to functional adjustments to various forms of internal social and economic stress (Renfrew 1973, 1979; Renfrew & Shennan 1982). In recent years the CWC culture has again been addressed as a an important case in a renewed, more theoretically oriented debate, focusing on prehistoric migrations as mechanisms in social formation and the constitution of culture (Kristiansen 1989). Today the CWC migration hypothesis seems to be focused upon quite strongly, at least here in Norway (Prescott & Walderhaug 1995).

Against this background I will finally evaluate the CWC migration hypothesis by comparing the CWC culture manifestations in Southern Scandinavia as a core area of expansion with Lithuania and Western Norway as marginal expansion zones.

Immediately before the expansion, Southern Scandinavia was populated by Funnel Beaker farmers, and on the northern fringe of this area also by a culturally mixed semi-Neolithic Pitted Ware/Funnel Beaker population (Larson 1991; Kristiansen 1989). Lithuania was populated by the Narva/Nemunas culture hunter-gatherers (Rimantienė 1992b, 1990). These were probably sedentary or semi-sedentary foragers with a wide-range economy and a (limited) specialisation in intensified exploitation of aquatic resources (Zvelebil 1990; Rimantienė 1992a). Western Norway was populated by sedentary hunter-gatherers with an economy primarily based on intensified exploitation of marine resources (Nygaard 1987; Bostwick Bjerck 1988; Bergsvik 1991, 1995; Bruen Olsen 1992). The Lithuanian and Western Norwegian archaeological records reflect interaction between the local hunter-gatherers and external farming group in both regions, in Lithuania primarily observed in the context of amber trade (Rimantienė 1994), in Western Norway in the context of small scale adoption of certain agricultural practices (Bruen Olsen 1992; Hjelle et al. 1992).

Regarding the appearances of the CWC culture, it is observed that in *Southern Scandinavia* the local CWC culture groups appear suddenly in a fully developed form, first on the marginal virgin soils of central, western and southern Jutland, and shortly afterward in the Funnel Beaker Culture settlement areas in Eastern Denmark and Scania (Kristiansen 1989). In the earliest phase there is no evidence in the radiocarbon dates for chronological overlap between the two



cultures. Where geographical overlap occurs in the initial phase of expansion, the expansion represents a break in cultural continuity (Davidsen 1975; Ebbesen 1986; Larson 1991). *This complete replacement is frequently used as a strong argument for the CWC migration hypothesis in Southern Scandinavia.* The Danish archaeologist Kristian Kristiansen sees the Danish CWC culture as a genuine case of tribal migration, and in fact in a wider scope as a part of a common-European Corded Ware Culture migration (1989).

The CWC culture in *Lithuania* is represented by stray finds and some early graves, but is so far difficult to identify in settlement contexts. It was of short duration in its pure form, although it appears to have caused cultural changes. It probably had a major impact on the development of the Late Neolithic Bay Coast culture, which is roughly simultaneous with the CWC culture groups in Scandinavia. The Bay Coast culture assemblages show a mixture of local and CWC derived elements, and it is interpreted as an autonomous semi-agrarian culture that developed in a process of acculturation between the CWC culture and the local Narva/Nemunas culture traditions (Rimantienė 1992b; 1994). The Bay Coast culture thus reflects cultural continuity in Lithuania during the period of CWC culture expansion.

The geographic distribution of CWC elements in *Norway* indicates a colonising expansion of farming settlements from the south and east into the forested, previously scarcely populated interior regions east of the central mountain plateau which separates Eastern and Western Norway (Hinch 1956). In western Norway the traditional settlement pattern remained generally unchanged in this phase. CWC grave and settlement contexts are lacking, whereas stray finds related to the CWC culture are scattered compared to Eastern Norway, and seem to fall into distribution patterns that can be associated with the local hunter-gatherer culture (Hinch 1956; Gjerland 1985; Bruen Olsen 1988, 1992). The CWC types of artefacts are therefore likely to represent contact elements obtained in a sphere of interaction between western hunter-gatherers and eastern/southern CWC farming groups (Bruen Olsen 1992, 1995). Although the local population seems to have resisted the external pressure of the CWC culture, it is obvious that this culture must have played an important part in the succeeding events that resulted in the inclusion of Western Norway in the Scandinavian sphere of late Neolithic/early Bronze age farming culture ideology and socio-economy. The main point here, however, is that local cultural continuity remained in Western Norway through the period of CWC expansion.

A comparison of the three regions reveals differences in the appearances of the CWC culture which reflect different cultural responses to the CWC expansion. The rapid and complete replacement observed in the Funnel Beaker Culture areas of Southern Scandinavia did not occur in the Lithuanian and Western Norwegian regions of hunter-gatherer domain. In these regions a certain amount of cultural continuity was maintained during the phase of expansion, although the impact of the CWC culture seems to have influenced the local developments in the direction of agriculture and ideological and social change.

These different forms of the CWC expansion in the north and the south are not adequately accounted for by this expansion as a part of a large scale European migration. In evaluating the replacement criterium for immigration used in the case of the Southern Scandinavian CWC culture, two key arguments against

the migration hypothesis can be derived from the Lithuanian and Western Norwegian examples. First, if migration was the prime force of change in these regions, then the CWC impact should *not* be expected to appear as locally specific cultural responses reflecting processes in which the local hunter-gatherers played an active part. Second, one can hardly expect that the hunter-gatherer populations of Lithuania and Western Norway were more enabled to resist migrating CWC culture groups than the Funnel Beaker farmers in Southern Scandinavia.

The replacement in Southern Scandinavia may of course still be interpreted as an immigration. But then one has to ask why the CWC groups' ability to migrate in populated areas was restricted to the areas of pre-existing farming populations. The way I see it, the marginal sphere approach reveals a spatial correlation between replacement and pre-existing farming populations which is more logically explained in terms of ideological and social transformation of farmers involving the acceptance of a new economic and religious structure capable of enforcing rapid internal and external extensions of the socio-economic sphere. This rapid change may have been caused by internal social stress (Damm 1990).

These implications of evaluating the Corded Ware Culture migration hypothesis in the Lithuanian and Western Norwegian contexts hopefully underscores the importance of what I have here called the marginal sphere approach to the study of the European Neolithic. The case of the Corded Ware Culture is one of several collaborative research goals that can be dealt with in this broad perspective.

## References

- Berglund, B.E. 1985. Early Agriculture in Scandinavia: Research Problems related to Pollenanalytical Studies. *Norwegian Archaeological Review*, Vol.18, Nos. 1-2.
- Bergsvik, K.A. 1991. *Ervervs- og bosetningsmønstre langs kysten av Nordhordland i steinalderen, belyst ved funn fra Fosnstraumen*. Unpublished masters thesis. Historisk museum. University of Bergen.
- Bergsvik, K.A. 1995. Bosetningsmønstre på kysten av Nordhordland i steinalder. En geografisk synsvinkel. *Arkeologiske Skrifter fra Arkeologisk institutt, Bergen Museum*, No.8-1995, 111-130.
- Bjerck, L. Bostwick. 1988. Remodeling the Neolithic in southern Norway. Another attack on a traditional problem. *Norwegian Archaeological Review*, Vol.21, No.1, 21-33.
- Bradley, R. 1993. *Altering the Earth*. The 1992 Rhind lectures. Society of Antiquaries of Scotland monograph series number 8.
- Childe, V. G. 1950. *Prehistoric Migrations*. Oslo.
- Damm, C. 1993. The Danish Single Grave Culture-Ethnic Migration or Social Construction? *Journal of Danish Archaeology*, Vol.10, 1991, 199-204.
- Davidsen, K. 1975. Relativ kronologi imellem neolitisk kultur (zur relativen Chronologie in mittelneolithischen in Dänemark) *Aarbøger for nordisk Oldkyndighed og Historie*. 1975. København.
- Ebbesen, K. 1986. Fred i enkeltgravstid. In: *Stridsøksetid i Sydskandinavien*. Adamsen, C & Ebbesen, K., eds. Arkæologiske skrifter 1. Københavns Universitet.
- Gebauer, A.B. & Price, T.D. 1992. The final frontier: Foragers to Farmers in Southern Scandinavia. In: *Transitions to Agriculture in Prehistory*. Gebauer, A.B. & Price, T.D., eds. Prehistoric Press. Madison Wisconsin.
- Gimbutas, M. 1980. The Kurgan Wave 2 (c. 3400-3200 B.C.) into Europe and the following Transformation of Culture. *Journal of Indo-European Studies*, Vol.8, Nos. 3 & 4.

- Gjerland, B. 1985. *Bergartsøkser i Vest-Noreg. Distribusjon sett i forhold til praktisk funksjon, økonomisk tilpasning og tradisjon i steinalderen*. Unpublished masters thesis. Historisk museum. University of Bergen.
- Hinch, E. 1955. Traktbegerkultur-Megalitkultur. En studie av Øst-Norges eldste neolitiske gruppe. *Universitetets Oldsaksamlings Årbok*, 1951-1953, 10-177. Oslo.
- Hinch, E. 1956. Yngre steinalders stridsøkskulturer i Norge. *Universitetet i Bergen Årbok-Historisk-antikvarisk rekke*, 1954, No. 1, 1-237. Bergen.
- Hjelle, K., Hufthammer, A.K., Kaland, P.E., Olsen, A. Bruen & Soltvedt, E.C. 1992. Utnyttning av naturressursene i Kotedalen – et tverrfaglig sammendrag. In: *Kotedalen – en fangstboplass gjennom 5000 år. Volum II. Naturvitenskapelige undersøkelser*.
- Hjelle, K., Hufthammer, A.K., Kaland, P.E., Olsen, A. Bruen & Soltvedt, E.C. 1992. 139-150. Historisk museum. University of Bergen.
- Keeley, L.H. 1992. The Introduction of Agriculture in the Western North European Plain. In: *Transitions to Agriculture in Prehistory*. Gebauer, A.B. & Price, T.D., eds., 81-95. Prehistory Press. Madison Wisconsin.
- Kristiansen, K. 1989. Prehistoric Migrations – the Case of the Single Grave and the Corded Ware Cultures. *Journal of Danish Archaeology*, Vol.8, 1989, 211-225. Odense.
- Larsson, L. (ed.) 1989. *Stridsyxekultur i Sydsandinavien*. Rapport från det andra nordiska symposiet om Stridsyxetid i Sydsandinavien 31.X -2.XI 1988. University of Lund, Report Series no. 36.
- Larsson, L. 1991. The introduction and establishment of agriculture. In: *The cultural landscape during 6000 years in southern Sweden*. Berglund, B.E., ed., 315-326. Ecological Bulletins 41. København.
- Malmer, M. 1975. *Stridsyxekulturen i Sverige och Norge*. Lund.
- Nygaard, S. 1987. Socio-economic developments along the Southwestern coast of Norway between 10000 and 4000 BP. In: *Mesolithic Northwest Europe: Recent trends*. Rowley-Conwy, P., Zvelebil, M. & Blankholm, H., eds., 147-154. Department of Archaeology and Prehistory. University of Sheffield.
- Nærøy, A.J. 1987. *Redskapstradisjon i Hordaland fra 5500 til 4000 før nåtid – en lokalkronologisk studie*. Unpublished masters thesis. Historisk museum. University of Bergen.
- Nærøy, A.J. 1993. Chronological and technological changes in Western Norway 6000-3800 BP. *Acta Archaeologica*, Vol.63, 1992, 77-95. København.
- Olsen, A. Bruen. 1988. Økonomisk tilpasning i vestnorsk yngre steinalder. Status og perspektiver. *Arkeologiske Skrifter, Historisk Museum*, No.4, 242-251. Bergen.
- Olsen, A. Bruen. 1992. *Kotedalen – en boplass gjennom 5000 år. Volum I. Fangstbosetning og tidlig jordbruk i vestnorsk steinalder: Nye funn og nye perspektiver*. Monography. Historisk museum. University of Bergen.
- Olsen, A. Bruen. 1995. Fangstsedentisme og tidlig jordbrukspraksis i vestnorsk yngre steinalder belyst ved undersøkelsene i Kotedalen, Radøy, Hordaland. *Arkeologiske Skrifter fra Arkeologisk institutt, Bergen Museum*, No.8-1995, 131-150.
- Prescott, C. & Walderhaug, E. 1995. The Last Frontier? Processes of Indo-Europeanization in Northern Europe: The Norwegian Case. *The Journal of Indo-European Studies*, Vol.23, Nos.3 and 4, 257-280.
- Renfrew, C. 1973. *Before Civilization*. Jonathan Cape. London.
- Renfrew, C. 1979. *Problems in European Prehistory*. Edinburgh.
- Renfrew, C. & Shennan, S. (eds.) 1982. *Ranking, resources and exchange. Aspects of the archaeology of early European Society*. Cambridge University Press
- Rimantienė, R. 1992a. Neolithic hunter-gatherers at Šventoji in Lithuania. *Antiquity*, Vol.66, 1992, 367-376.
- Rimantienė, R. 1992b. The Neolithic of the Eastern Baltic. *Journal of World Prehistory*, Vol.6, No. 1, 97-143.
- Rimantienė, R. 1994. *Die Steinzeit in Litauen*. Aus Berich des Römisch-Germanischen

- Kommision. Mainz am Rhein.
- Rimantienė, R. & Česnys, G. 1991. The Late Globular Amphora Culture and its creators in the Baltic area from archaeological and anthropological points of view. *Journal of Indo-European Studies*, Vol.18, Nos.3&4, 339-358.
- Sherratt, A. 1981. Plough and pastoralism: aspects of secondary products revolution. In: *Pattern of the past*. Studies in honour of David Clarke. Hodder, I., Isaac, G. & Hammond, N., eds.
- Sherratt, A. 1990. The genesis of megaliths: monumentality, ethnicity and social complexity in Neolithic north-west Europe. *World Archaeology*, Vol.22, No.2, 148-167.
- Thomas, J. 1988. Neolithic Explanations revisited: The Mesolithic-Neolithic Transition in Britain and South Scandinavia. *Proceedings of the Prehistoric Society*, Vol. 54, 1988, 59-66.
- Whittle, A. 1994. The first farmers. In *Prehistory of Europe*. Cunliffe, B., ed., 136-166. Oxford.
- Zvelebil, M. 1990. Economic Intensification and postglacial Hunter-gatherers in North temperate Europe. In: *The Mesolithic in Europe*. Bonsall, J.C., ed., 80-88. Edinburgh: John Donald.
- Østmo, E. 1988. Etableringen av jordbrukskultur i Østfold i steinalderen. *Universitetets Oldsaksamlings Skrifter, Ny Rekke*, No.10. Oslo.

## Lietuva ir Vakarų Norvegija neolito periodu: tyrimų tikslai kilo iš lyginamojo dviejų paribio regionų neolito Europoje įvertinimo

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### Santrauka

Šio straipsnio centre – Lietuvos ir Vakarų Norvegijos neolito archeologija, numatant ateityje mokslinio bendradarbiavimo perspektyvą. Pagrindinis tikslas yra įvertinti galimą bendradarbiavimo strategiją ir tikslus siekiant progresyvesniais metodais iširti neolito periodą.

Trumpas palyginimas atskleidė žymius adaptacinių sąlygų, archeologinių šaltinių, kultūros istorijos bei tyrimų istorijos skirtumus. Trūksta dirbinių tipų, kurie atspindėtų tiesioginius ryšius neolito laikotarpiu. Tačiau vystymosi paralelės atskleidžia potencialiai svarbius panašumus. Tiek Lietuva, tiek Vakarų Norvegija didžiąją neolito laikotarpio dalį buvo vietinių medžiotojų-rinkėjų kultūrų karalijos. Jos daugiau kaip tūkstantį metų egzistavo kaimynystėje ir galbūt artimai kontaktavo su Piltuvėlinės keramikos kultūros žemdirbių bendruomenėmis. Abiejuose rajonuose šių medžiotojų-rinkėjų bendruomenių virtimas žemdirbių arba pusiau žemdirbių visuomenėmis vyko tuo pačiu metu ir turėjo ryšį su Virvelinės keramikos kultūra.

Autoriaus nuomone, šios vystymosi paralelės, aptiktos tokiose toli vienas nuo kito nutolusiuose šiaurės Europos taškuose, gali būti mokslinio bendradarbiavimo pagrindas. Atsisakius vietinės perspektyvos ir pritaikius paribio analizės metodą, galima nagrinėti bendras Piltuvėlinės ir Virvelinės keramikos kultūrų apraiškas Europoje. Kol kas klausimas remiasi pagrindinės paplitimo zonos principu, nekreipiant dėmesio į šių neolito kultūrų ideologinių bei socialinių-ekonominių sistemų funkcionavimą paribio zonoje ir sąveiką bei integraciją su medžiotojų-rinkėjų bendruomenėmis. Požiūris į Lietuvos ir Vakarų Norvegijos neolito visuomenes, kaip paribio sferas, šiame plačiame kontekste galbūt leistų geriau suprasti šių kultūrų dinamiką ir prigimtį, taip pat Šiaurės Europos neolitizacijos procesus.

Norint pademonstruoti paribio zonų analizės metodo svarbą, Virvelinės keramikos kultūros migracijos hipotezė vertinama lyginant šios kultūros pagrindinio paplitimo zoną pietų Skandinavijoje su Lietuvos/Vakarų Norvegijos paribio zona. Parodoma, kad Pietų Skandinavijoje buvo ryški skiriamoji linija tarp Piltuvėlinių taurių ir Virvelinės keramikos kultūrų; tuo tarpu nebuvo jokios skiriamosios linijos paribio paplitimo zonoje. Tiek Vakarų Norvegijoje, tiek Lietuvoje pastebimas tam tikras buvusių kultūrų tęstinumas, plintant Virvelinės keramikos kultūrai. Šios skirtingos Virvelinės keramikos kultūros paplitimo formos šiaurėje ir pietuose kol kas nebuvo traktuojamos kaip dalis bendros visai Europai Virvelinės kultūros migracijos. Paribio zonų tyrimo metodas atskleidžia erdvinę koreliaciją Pietų Skandinavijoje tarp vietinės Piltuvėlinės keramikos žemdirbių bendruomenės paplitimo zonos ir teritorijos, kur šią kultūrą pakeitė vėlyvesnės žemdirbių bendruomenės Virvelinės keramikos kultūra. Šis metodas taip pat leidžia logiškiau paaiškinti šią kultūrų kaitą kaip žemdirbių ideologinių pažiūrų transformaciją, suvokiant bei priimant naują socialinę ir religinę struktūrą, kuri skatino kultūrinis pokyčius, greitai paplito socialinėje ekonominėje srityje.

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## The "Stone Age in South Lithuania" Project

### VYGANDAS JUODAGALVIS

#### Introduction

After receiving independence, Lithuania lived through a period of great political and economic change. Naturally, this had an impact on archaeology and all other sciences. Today, there are more opportunities to become familiar with the work and techniques of archaeologists in Western countries. There is, however, a dearth of funds available for archaeological research in Lithuania. This creates a frustrating situation where Lithuanian archaeologists know what questions they would like to address, and what equipment and methods of investigation they would like to use, but they cannot carry out the work due to the lack of financial resources. Generally, there are enough funds to carry out field work, but insufficient resources for post-excavation work, such as scientific investigation of the recovered material. This is a particular problem for research institutions and museums. In this paper, I would like to present one attempt to solve these problems which has been supported by the Lithuanian State Science and Study Foundation.

The Lithuanian State Science and Study Foundation was established in 1994. Every year it awards money in support of scientific programs. Given the vast number of programs in need of funding, one way to attempt to meet the demand is through cross-disciplinary collaboration. In 1994, the Foundation decided to support a program titled "Stone Age in South Lithuania" and carried out by four separate institutions: the National Museum of Lithuania, the Lithuanian Institute of History, the Institute of Lithuanian Geology, and the Department of Geology and Mineralogy at Vilnius University.

#### Archaeological and Geological Background, and the Aims of the Research

South Lithuania is not *tabula rasa* on the Lithuanian archaeological map. It is especially rich in Stone Age sites and finds (Rimantienė 1974). Stone Age studies in Southern Lithuania began in the 19th century, when amateur archaeologists began