



Relative and absolute chronology of burial of Corded Ware culture in Moravia

Jaroslav Peška

Abstract

The discussion oscillating around the internal periodization of the Moravian Corded Ware culture (MCWC) group and the cultural affiliation of the local phase of its development has been known for quite a long time and has been going on between the celebrant and the author of this article for many years. The aim of the paper is to take a position on the issue in the context of new research and knowledge of local MCWC grave assemblages and statistical methods, all supported by a series of absolute radiocarbon data not yet fully evaluated. The need for the creation of new content for both funerary groups, and especially, findspot subgroups/phases/subphases based on statistical-analytical tools is demonstrated through examples of distinctive and more chronologically sensitive artefacts, among which the Dřevohostice, Balkan and Nagyrév jugs dominate. In fact, in contrast to initial ideas, we register temporal shifts and associations of individual grave goods within existing subgroups. Either way, we conclude that due to the continuity in the burial ritual and with the simultaneous disappearance of cord-decorated ceramic and the increase of local pottery of Carpatho-Balkan provenance, only the habitus of the material culture recorded in the graves is changing, but archaeologically (and probably biologically as well) it is one and the same culture with corded pottery with specificities of the Moravian environment.

Keywords: Moravian Corded Ware culture group, relative and absolute chronology, funeral and find groups

7.1 Introduction

7.1.1 MCWC classification and its opposition

The specific Moravian group of the Corded Ware culture (MCWC) with many regional differences and strong links to the Carpathian-Balkan environment has been recognized for almost 150 years. The existing internal subdivision of the local period of development of the Moravian group, which represents over 90% of all finds, by L. Šebela (1986; 1991; 1993) is based on the presence/absence or correlation of certain distinctive ceramic shapes and is based on M. Buchvaldek's original classification of find groups (Buchvaldek 1966; 1967; 1986). Šebela distinguished three find subgroups or phases (IIIa–IIIc) for the period of local development of the MCWC, with the older ones (IIIa Marefy-Slízany) being characterized by classical Dřevohostice jugs and cord-decorated beakers, the middle (IIIb Letonice–Krumvíř) is characterized by the presence of a Nagyrév type A jug (Letonice variant) with a handle at the rim, and the younger (IIIc Hoštice-Heroltice–Tvarožná) by a Nagyrév type C jug with a handle on the body of the vessel, together with an Ökörhalom type B jug (terminology based on the works of M. Buchvaldek). A critique of this internal periodization was at one time addressed by F. Bertemes and V. Heyd (2002), citing the syncretion of Corded Ware–Makó/Kosihy-Čaka and Bell Beaker as an example of *Social Anthropology* with the designation of 'complex communities' (Bertemes & Heyd 2002: 188). They build it on the fact that the position of the handle itself is not a sufficient chronological argument (although they compare it in two distinct ceramic classes: Dřevohostice vs. Nagyrév jug), pointing to the chronological vagueness of some funerary contexts with intermingled representations of different ceramic types. In particular, they see a large difference between subgroups I/II and IIIa on

one hand and IIIb/c on the other, which they interpret as the existence of two different cultures, with only MCWC I/II being pure corded pottery, IIIa being a mixed culture, and IIIb/c being a transformation into a pure Carpathian culture (meaning Makó/Kosihy-Čaka), while arguing for the merging of subgroups IIIb and IIIc into one (Bertemes & Heyd 2002: 196). The finds from Holubice I, H2, Dobrochov and Krumvíř H 6 place the development of a separate MCWC at the end of the period. They suggest a more detailed subdivision of subgroup IIIa into IIIa-early (Kostelec na Hané) and IIIa-late (Senice na Hané, Holubice, Dobrochov). Younger graves such as Velešovice, Pavlov, Tvarožná I, Lutín, Modřice (or Šebela whole IIIb and IIIc) are already considered as separate Makó/Kosihy-Čaka in Moravia (Bertemes & Heyd 2002: 196, Abb. 2).

We certainly cannot agree with all of the authors' conclusions. They argue for the predominance of the urn burial ritual (which is definitely not the case in Moravia), the spacious grave pits (they are already known) and the rich ceramic inventory identical to the shapes in the Carpathian Basin, i.e. the already mentioned Balkan, Nagyrév and Ökörhalom jugs, mugs and internally decorated bowls (Modřice, Vyškov-Nosálovice) (Bertemes & Heyd 2002: 196–200). As a clear example, the authors cite a grave unit (Object 7) from Modřice, containing, besides clear 'Carpathian' shapes (a derivative of the Dřevohostice jug CD2, a brushing egg-shaped pot P, an undecorated amphora-shaped jug AC), also a decorated Ljubljana bowl LH2, a faceted hammer-axe FHA and a CuM copper knife/shaver blade (Matějčková 2000: Fig. 3b). A slightly older adjacent grave with a clear skeletal burial of MCWC-type and furnishings in the form of an undecorated beaker and a Dřevohostice jug could be evidence of continuity of burial just between subgroups/phases IIIa and IIIb (Matějčková 2000: Fig. 3a). The aforementioned differences in the position of the handles on the jugs in the common grave units of the MCWC, the similar tendency in the BBC (Bell Beaker culture), the grave inventory from Szigetszentmiklós H3 (Bertemes & Heyd 2002: 193, Abb. 3) etc., are examples where we do not fully agree with the cited authors.

7.1.2 Chronology of MCWC funeral groups

In order to resolve the problem of unsatisfactory internal periodization of MCWC, let us now take a closer look at the chronological position of the MCWC funeral groups themselves. We have attempted to take into account mainly larger groups of graves with a typologically conclusive inventory, or important and relatively well classifiable solitary funerary contexts. We then confronted these with absolute data series or single data from graves with significant content.

A typical feature of the graves of MCWC are smaller groups of burials (up to 40 graves so far) at greater distances from each other, which is considered to be originally covered by mounds, in rows or more freely scattered on the surface. Superpositions are not available (further evidence for the existence of barrows), only in exceptional cases do we witness subsequent burials or putative stratigraphy. In Grave 12 from Určice, the primary male burial included a corded beaker, a Dřevohostice jug var. Určice (CD1/2), an egg-shaped pot with a handle and a faceted hammer-axe, and the secondary triple burial included de facto the same Dřevohostice jug (CD1/2) accompanied by the more advanced Velešovice variety CD2, an amphora-shaped jug and an undecorated beaker, indicating a short period of successive deposition (Čižmář & Šmíd 1996: 296, Figs. 4–5). Evidence of subsequent burial was supposed to be the urn burial of two individuals (anthropology and unequal degree of cremation of human remains) in Pavlov Grave 780 (Rakovský & Šebela 1991: 213, 217). However, due to the presence of the identical plastic application (extension of the lower root of the banded handle) in both burials on the amphora-shaped jug and on the youngest variant of the Dřevohostice jug, we consider it to be an incandescent double burial (Peška 2009: 223–224; 2010: 251) and due to

► Figure 1. A summary of the duration of burial groups of the local MCWC (phases according Šebela 1986; 1991; 1993) and the combination of absolute data in the groups. Illustration K. Pluskalová.

LOCAL MCWC						
SITE	NUMBER OF GRAVES	IIIa	IIIa/b	IIIb	IIIc	¹⁴ C DATING (combined 2σ BC)
Archlebov	3					
Bezměrov I	23					
Brno - Horní Heršpice	1					2461-2306
Brno - Starý Lískovec	6					
Brodek u PV - Hůrka	3					2195-2038
Brodek u PV - Pazderna	3					
Dětkovice - Za zahradama	2					
Domanyšovice	2					2465-2348
Držovice - Pastviska	6					2842-2578
Dřevohostice	13					
Holubice II	4					
Holubice IV	3					
Holubice VII	5					
Hoštice IV	16(17)					
Hulín I	10					
Hulín-Pravčice I	9					
Ivanovice na Hané 3/2	19					
Ivanovice na Hané 4	8					2567-2468
Ivanovice na Hané 7	6					
Komořany 1988	10					
Komořany 1989	7					
Krumviř	7	-----?				
Letovice	4					
Lutín	>5					
Marefy IV	6					
Morkůvky	1					2276-2141
Modřice 1997	2					
Nechvalín	6					
Nitkovice I	4					
Olomouc-Nemilany 1	6					2574-2496
Olomouc-Nemilany 3	37					
Olomouc-Slavonín I	11					
Olomouc-Slavonín - Arbesova ul.	9					
Olomouc-Slavonín - Horní lán	6-7					2286-2148
Olomouc-Řepčín I	7					
Pavlov - Horní pole	3					2473-2350
Prostějov - MUBEA, Kralický háj	11					2470-2462
Seloutky - Dlouhé Čtvrtě	1					2566-2466
Slatinky	6					
Slžany	7					
Smržice	1					2629-2492
Stříbrnice - Lopaty	14					2561-2468
Tučapy 1989	4					
Tvarožná I	>2					
Určice - Větrák	3					
Určice - Záhumení	3					
Velešovice 1985	10					2560-2466
Velešovice 1987	2					
Velešovice 1988	3					
Velešovice I 1985	1					
Velký Týnec	8					
Vicemilice I	6					
Vrchoslavice - Vitčice I	10					2572-2475
Vřesovice - Padělky	2					
Vyškov 1989	5					
Vyškov - Dědice	3					2570-2475
Vyškov - Nosálovice	3					

the presence of var. Morkůvky CD3 in all the graves at Pavlov, we can assume a minimal temporal spacing of the deposition of the other burials.

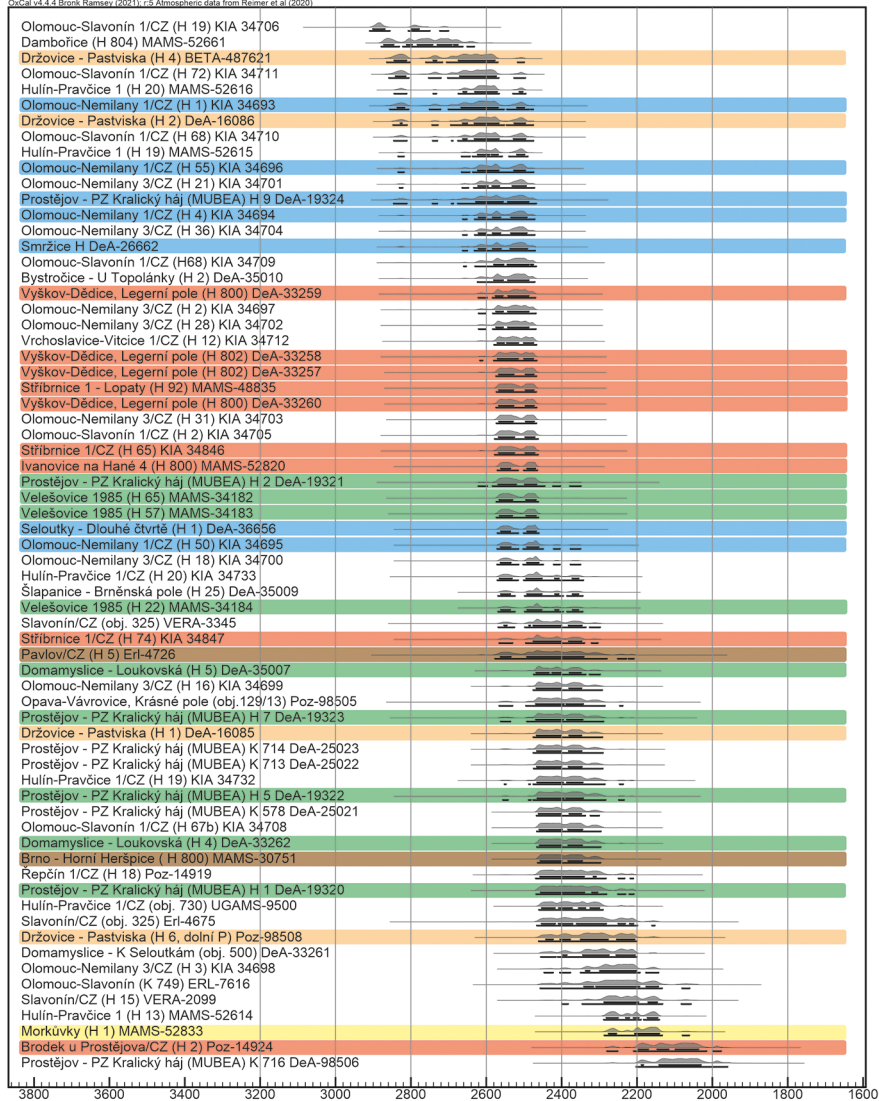
As proven by the existing investigation of multivariate statistics (Peška & Králík 2013), almost all of the mentioned types of jugs are very close to each other, their common occurrence is often intertwined and it is very difficult to determine their mutual sequence or chronological position. Nevertheless, the chronological sequence CD1 → CD1/2 → CD2 → CD3 emerges for the Dřevohostice jugs, whereas we are not so sure about the Balkan F1 → F1/2 → F2 sequence (in Moravia it is valid, but not in the Carpathian Basin). ‘Non-chronological’ aspects (gender, social position, regional influences) may play a role.

The analysis of the representative burial groups of the MCWC, on the basis of the typo-chronological criteria applied so far, allows us to conclude unequivocally that there is a continuity of burials between subgroups IIIa and IIIb, or IIIa/b–IIIb (22 cases), and in some cases we can observe the development of burials throughout the entire local phase of the MCWC (Držovice-Pastvicka), although this is still an isolated case. It is true that some necropolises (10 times) are established in the earliest period of the local MCWC (IIIa or IIIa/b) and burials end there, others are established only in the middle local subgroup/phase (IIIb) and end there (22 times) or continue into the younger phase (IIIc) (perhaps Pavlov-Horní pole, we date a grave from Brno-Horní Heršpice to the turn of IIIb/c; Peška & Fikrle 2017). We date several individual graves (Nítkovice I, Tvarožná I, Morkůvky) to the youngest period of local development (IIIc).

The combination (2 sigma) of absolute data for a given burial group (Fig. 1) does not correlate with the typo-chronological dating of burials without problems. However, the framework shows a tendency of continuity in burials

► Figure 2. Overview of radiocarbon dates of the local MCWC. Colour-coded assignment to chronological subgroups (corresponds with the different colours of Fig. 1). Illustration P. Grenar.

OxCal v4.4.4 Bronk Ramsey (2021): r5 Atmospheric data from Reimer et al (2020)



Calibrated date (calBC)

in the period 2570–2466 BC (IIIa–IIIb), 2470–2306 BC in IIIb and ending in the 22nd century BC (Morkůvky: 2276–2141 BC, 2 sigma) in phase IIIc. Slightly better fits the setting of the individual observed contexts against the background of the overall ¹⁴C structure of the MCWC data (Fig. 2).

Continuity of the unchanged burial ritual (urn graves continuously from IIIa, accumulation of IIIb) and grave goods at several Moravian necropolises with gradual decline and then absence of typical

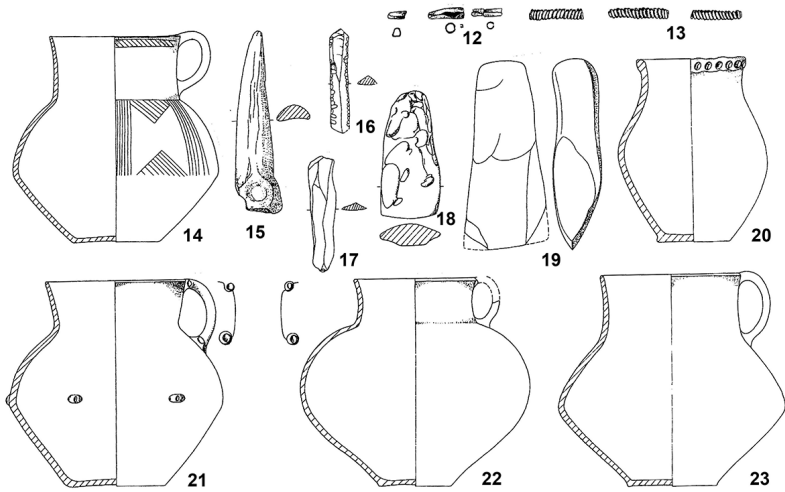
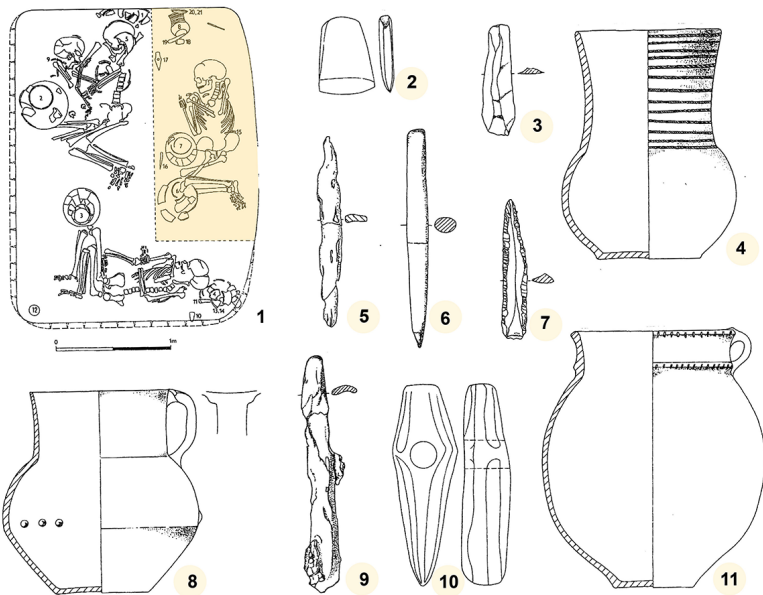
corded equipment (corded beaker, corded amphora, hammer-axe) with simultaneous increase of local shapes, Carpathian or Transdanubian-Carpathian origins, convinces us that these finds must also be considered part of the Moravian group of CWC, albeit with a predominantly ‘Carpathian’ inventory or rather the consequences of its ‘ideology’ (mostly local production). CWC remains the typical sexually differentiated burial rite and, we assume, the biological carrier of the culture. The ceramic templates are mostly foreign, but the actual production will be of domestic origin. This will hopefully include bone and antler industry (especially massive bone chisels), polished hammer-axes and axes and chipped tools (blades) and, as with pottery, metalwork based on foreign models(?).

7.1.3 New stage of local development (IIIa/IIIb)

However, the need for a new typology with a unified terminology and the elaboration of an internal periodization of the MCWC based on new findings with respect to all relevant artefact categories remains a reality.

A number of new findings lead to a certain correction of the existing internal periodization of L. Šebela (1986: 189). At the same time, it should be noted that stratigraphic observations in the MCWC are rather exceptional

► Figure 3. Určice, Grave 12. Primary burial (yellow) and secondary triple grave with equipment. Illustration after Peška (2009).



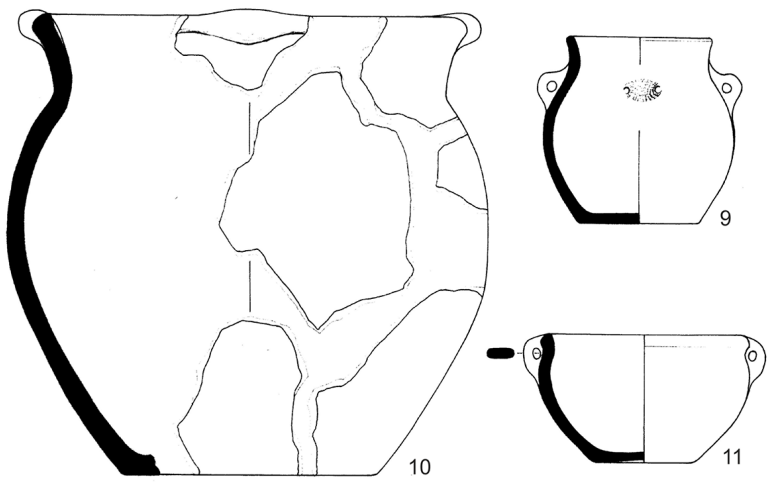
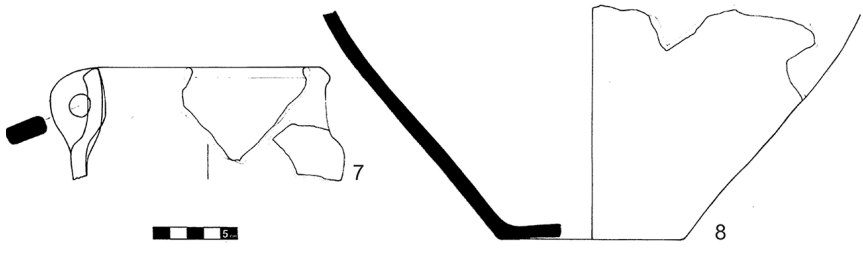
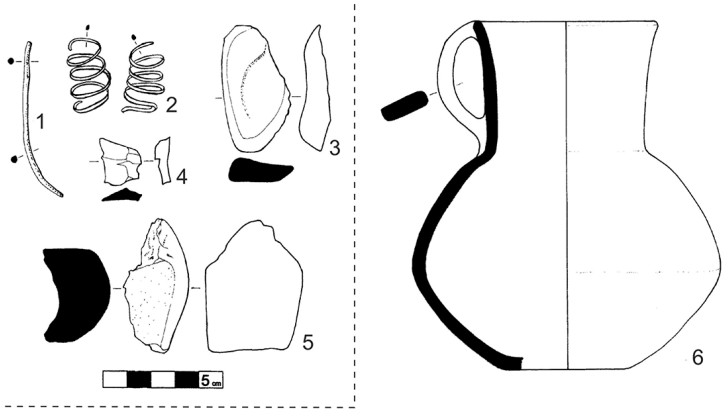
Obr. 36 Určice H 12 (podle ČIŽMÁŘ/ŠMÍD 1996)

(Pavlov, Určice), the absolute data series is not evenly distributed, the aggregate has not been evaluated in detail yet and shows a number of problems (cf. Peška 2010; 2011).

The analysis of the Dřevohostice jugs revealed a smooth development between the older and the middle local phase (CD1 → CD1/2 → CD2), where the transition between the classical (CD 1) and the form with a reduced neck (CD2) is represented either by forms with classical tectonics but without the characteristic recessed decoration, but with plastic decoration, or with the classical decoration scheme but with a hint of a reduced neck (CD1/2 variant Vřesovice). This trend is well attested within local phases IIIa and IIIb at multi-burials, including mound burials with distinctive inventories (Marefy, Letonice and others), and is confirmed by other burials (Vřesovice), including a unique multi-burial with a subsequent burial from Určice (Grave 12; Fig. 3). These, together with the contents of the grave under Mound 6 in Letonice, form a transition between the two (IIIa/b: Šebela 1999: Pl. 43–47, 53:1–2, 54; Prudká & Šmíd 1994: Fig. 2–3; Čižmář & Šmíd 1996: Figs. 4–5). We therefore propose the insertion of subphase IIIa/IIIb between the two phases of local evolution perceived so far, which probably did not last very long and, moreover, could be largely synchronous with the two original ones.

The fact remains that the emergence of the Balkan type F1 (IIIb) is later than that of the classical Dřevohostice jug CD1 (IIIa), although in the Vučedol-Ljubljana area (a less distinct form) it could also be otherwise (unstable stratigraphy, or finding contexts). The problem is then the interrelation of F1 Letonice variant and F2 Tvarožná variant, including their transitional form F1/2 Alsónémedi variant, and the position in relation to the older variation of the Ökörhalom B-type jug (F3.1 Hoštice-Heroltice variant) in a wider

► Figure 4. Olomouc-Slavonín, Arbesova ulice, Grave 7. Burial equipment with a derivative of a Dřevohostice-Balkan jug (6). Drawing A. Pešková.



territory than Moravia, as well as the delimitation of the younger varieties of the Dřevohostice jugs CD2 (variant Velešovice) and CD3 (variant Morkůvky) in relation to each other (Peška & Králík 2013). A new transitional form of the Dřevohostice and Balkan jug (CD1/F1), found in the accompaniment of other local forms in Grave 7 at the burial site in Olomouc-Slavonín, Arbesova ulice (Fig. 4), enters the problem newly addressed, a new derivative opening up the possibility of a new genesis of Early Nagyrév jugs.

7.1.4 New definition and content finding aid subgroups/ phases/subphases

The older **subgroup or Phase IIIa** is characterized mainly by the classical form of Dřevohostice jugs (CD1), with which transitional forms with a hint of a lower neck (CD1/2) appear in parallel at the end of this section. In addition to the corded beakers with an S-shaped profile, cylindrical neck, biconical and pear-shaped body, beakers decorated with a 'fish bone' bone motif (B2) are preserved (probably from group II), amphora-shaped jugs (AC) appear, and two-ear flask amphorae with a conical base, bluntly curved spout, egg-shaped profile, and two small handles below the neck appear. From the non-ceramic inventory, this includes mainly faceted hammer-axes and simple shaped hammer-axes with facets, and perhaps also hammer-axes of Silesian type (from the 2nd find group), and ornaments made of animal teeth and shells.

The **transitional section between the two (subphase IIIa/b)** is characterized by CD1/2, with the first Moravian-type bowls (Hm), egg-shaped pots (P), egg-shaped pots with handles (Ph) or pots decorated with cord impressions (DSch), amphora-shaped jugs (AC), followed by cord-decorated beakers (B1), but apparently not continued by beakers with 'fish bone' (B2). A new transitional form of Dřevohostice and Balkan jugs (CD1/F1) appears. We encounter faceted hammer-axes, spiral tubes (SpRo) and the first copper knife/shear blades (CuM). If we were to evaluate the group of finds overall,

we would have to place them, on the basis of the most advanced forms (e.g. CD2), at the beginning of subgroup IIIb. Nevertheless, this intermediate stage seems to find its justification. The presence of the A-hammer-axes in Grave 1 Velešovice 1988, together with local pottery and just the CD1/2 jug (Čižmář & Geisler 1998: Tab. 32:7), may indicate the re-utilization or survival of this type of male insignia.

Middle subgroup or phase IIIb. In this group, the distinctive type is the Balkan jug F1 and the Velešovice CD2 variety, followed by undecorated or plastically decorated amphora-shaped jugs AC and, rather sporadically, also corded beakers B 1, amphorae with handles on the neck with a sharply or bluntly broken spout. Probably some mug-shaped forms of Dřevohostice jugs CD3 (variant Morkůvky), the first specimens of the Ökörhalom B type with a 'round' spout (Letonice Mound 5), dowel-shaped or cylindrical forms G1, cup-shaped mugs SN, bowls of the Schönfeld type (H5), sharply profiled bowls with handles H3, bowls of the Moravian type Hm, moulded appliquéés and ribbed handles are common. In addition to the Silesian-type and simple-shaped hammer-axes, there are also simple hammer-axes with facets; besides the polished ones, we also record chipped axes. CuM copper blades are the most widespread, and hair ornaments made of HaS2 double wire are rare.

The younger subgroup/phase IIIc is based on a small number of graves, not reproduced by new excavations. The leading form is the Balkan jug variant F2 and the Ökörhalom B type (now F3.1), appearing together in the graves. With the exception of these two types, there is some increase in the low mug-shaped CD3 variety and perhaps also in the S-shaped mugs Ns (they may be older). A new finding is the continuation of undecorated amphora-shaped jugs and egg-shaped amphorae with tunnel-shaped handles on the sub-crowns. The rest of the inventory actually just replicates fill IIIb with a higher frequency of some representatives (cylindrical cups with handles G1, sharply profiled bowls H3, pots with handles Dh, egg-shaped pots with handles Ph). Apparently the absence of hammer-axes is true; ground axes continue.

7.1.5 Unresolved problem

The problem of the internal division of the MCWC is not definitively solved. The joint occurrence of both types of Balkan jugs in one grave unit in pure form is not documented even in the Carpatho-Balkan area (Grave 8 from Čaka is uncertain) and in the Csepel group of the BBC it is recorded perhaps only in the combination of F2 with F1/2. Nevertheless, there is a lot of evidence for their chronological proximity (acceptance of their presence in Grave 8 from Čaka, outside Moravia both forms already in Makó/Kosihy-Čaka or older Somogyvár-Vinkovci: Makó/Kosihy-Čaka complex according to D. Vollmann – up to the older Nagyrev culture only with a different intensity). F1 is known from MCWC graves with CD3 from e.g. Vyškov-Nosálovice or Velký Týnec, it is represented in the younger material of Somogyvár-Vinkovci culture. Also important is their appearance with an older variety of the Ökörhalom B type (F3.1), i.e. with the same type in the Makó/Kosihy-Čaka graves (F1) and in the MCWC fill (F2), so the mutual shift should not be large. However, unequivocal evidence is lacking. On the other hand, there are a number of arguments for a younger status or at least a longer survival of F2 (in younger material of Csepel group together with F1/2, in graves without decorated bell beakers only, more frequent occurrence in older Nagyrev culture) in a distinctive version however outside the Moravian border. We are not sure whether this is sufficient to justify a chronologically separate phase or horizon within the MCWC (IIIc).

If in the future the practically parallel development of both forms can be clearly demonstrated, the hypothesis of a common or very close origin and simultaneous further development of F1 and F2, manifested differently mainly territorially, could be valid. At some point, the F1/2 Alsónémedi variant with its proximity to the contents of the especially oldest Proto-Únětice culture would also join them (unless new finds prove the need for an even more precise division of the Balkan jugs). It turns out that the separation of the late Phase IIIc according to L. Šebela on the basis of only two, albeit distinctive shapes, is not quite possible. In the rest of the inventory we did not observe a clear

boundary compared to the previous development. As it turns out, the problem is the longer lifespan and the mutual parallelism of several distinctive shapes or types or variants (beakers with cord impressions and amphora-shaped jugs also in IIIb, egg-shaped pots and bowls of Moravian type from IIIa/b to IIIc, A-hammer-axe in grave IIIb, hammer-axes and copper objects continuously), so that the establishment of a firm skeleton of internal periodization is very difficult. If we assume the merging of both subgroups of the younger and later local MCWC development into one time period, we would have to 'stretch' its duration up to the IIIc level, when the development of regionality comes into consideration (the question of the youngest MCWC in eastern Moravia, etc.).

7.2 Conclusion and summary

MCWC is manifested by the predominance of small chronologically rather closed burial groups at certain distances from each other, which makes it difficult to define their areal boundaries. In any case, we have many examples where within a single group we can record a clear continuity in burials during the older and middle (or even younger subgroup/phase: Držovice-Pastviska) local phase of development; rarer are examples of burials dated to IIIb–IIIc (Pavlov, Horní pole), while the end of the culture is represented by only a few graves (Morkůvky, Nítkovice, Tvarožná I). During the local development, we do not observe practically any fundamental changes in the burial ritual, only the habitus of the material culture changes with the gradual disappearance of corded ornament and the predominance of local forms of pottery with genesis in the southeast (Carpathian-Balkan region), while preserving several attributes of domestic production (bone chisels, cut and chipped ware, metals?). On the basis of these facts, we consider the whole period of local development as a continuum of the Corded Ware culture – transformed under the strong influences of the southeastern neighbourhood, from where progressive patterns and technologies are adopted.

References

- Bertemes, F. & Heyd, V. 2002. Der Übergang Kupferzeit/Frühbronzezeit am Nordwestrand des Karpatenbeckens: kulturgeschichtliche und paläometallurgische Betrachtungen. In M. Bartelheim, E. Pernicka & R. Krause (eds.) *Die Anfänge der Metallurgie in der alten Welt: Forschungen zur Archäometrie und Altertumswissenschaft* 1: 185–228. Rahden: Leidorf.
- Buchvaldek, M. 1966. Die Schnurkeramik in Mitteleuropa: Zur Herausstellung der Fundgruppen und die Frage ihrer gegenseitigen Beziehungen. *Památky archeologické* LVII: 126–171.
- Buchvaldek, M. 1967. *Die Schnurkeramik in Böhmen. Acta Universitatis Carolinae, Philosophica et Historica Monographia* XIX.
- Buchvaldek, M. 1986. *Kultura se šňůrovou keramikou ve střední Evropě I: Skupiny mezi Harcem a Bílými Karpaty*. Praehistorica XII.
- Čižmář, M. & Geisler, M. 1998. *Hroby kultury se šňůrovou keramikou z prostoru dálnice Brno-Vyškov: Pravěk Supplementum* 1. Brno: Ústav archeologické památkové péče Brno.
- Čižmář, M. & Šmíd, M. 1996. Hroby kultury se šňůrovou keramikou z Určic, okr. Prostějov. *Archeologické rozhledy* XLVIII: 289–299.
- Matějčková, A. 2000. Eneolitické hroby z Modřic. *Pravěk NŘ* 9: 211–221.
- Peška, J. 2009. *Protoúnětické pohřebiště z Pavlova*. Olomouc: Archeologické centrum Olomouc.
- Peška, J. 2010. Kultura se šňůrovou keramikou na Moravě v kontrapozici radiokarbonového datování. In S. Csopek & S. Kadrow (eds.) *Mente et rutro: Studia archeologica Johanni Machnik viro doctissimo octogesimo vitae ab amicis, collegis et discipulis oblata*: 247–273. Rzeszów: Institutum Archaeologicum Universitatis Ressoviensis.
- Peška, J. 2011. Neue absolute Datierung aus dem späten Äneolithikum Mährens. *Offa* 63/64: 7–44.
- Peška, J. & Fikrle, M. 2017. Hrob ženy kultury se šňůrovou keramikou s měděnými šperky z Brna-Horních Heršpic. *Pravěk NŘ* 25: 27–52.
- Peška, J. & Králík, M. 2013. ‘Nagyrev jugs’ and their archaeological context. In V. Heyd, G. Kulcsár & V. Szeverényi (eds.) *Transitions to the Bronze Age: Interregional Interaction and Socio-Cultural Change in the Third Millennium BC Carpathian Basin and Neighbouring Regions*: 245–286. Budapest: Archaeolingua.
- Prudká, A. & Šmíd, M. 1994. Hroby kultury se šňůrovou keramikou z Vřesovic, okr. Prostějov. *Časopis Moravského zemského muzea v Brně* LXXIX: 37–51.

Rakovský, I. & Šebela, L. 1991. Hroby se šňůrovou keramikou v Pavlově. *Archeologické rozhledy* XLIII: 206–221.

Šebela, L. 1986. *Postavení kultury se šňůrovou keramikou v moravském eneolitu a její vztah k vývoji v Karpatské kotlině I–III*. Brno: Archeologický ústav AV ČR.

Šebela, L. 1991. Die Chronologie der Schnurkeramik in Mähren. In C. Strahm (ed.) *Die Chronologie der regionalen Gruppen: Zusammenfassung Die kontinentaleuropäischen Gruppen der Kulturmit Schnurkeramik. Internationales Symposium Praha-Štířín 1990: 23–28*. Freiburg: Institut für Ur- und Frühgeschichte Freiburg.

Šebela, L. 1993. Lid se šňůrovou keramikou. In V. Podborský (ed.) *Pravěké dějiny Moravy: 204–218*. Vlastivěda Moravská. Země a lid, Nová řada 3.

Šebela, L. 1999. *The Corded Ware culture in Moravia and the adjacent Part of Silesia (Catalogue)*. Fontes Archaeologiae Moravicae XXIII.