## THE CREMATION GRAVES FROM THE CEMETERY OF TÎRGŞOR (THIRD-FOURTH CENTURIES A.D.)<sup>1</sup>

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The cemetery from Tîrgşor is well known because of its importance for the understanding of the Černjachov culture in the southern area of its extension. We owe all the information about it to the work of Gh. Diaconu who started the excavation in 1956 and still conducts it. In 1965 he published a monograph,<sup>2</sup> and after that, many interpretive contributions, some of them including new materials from the cemetery.<sup>3</sup> The modesty of the material means allocated and the complexity of the site are responsible for the long duration of the research. The second volume of the monograph, containing all the information about the unpublished graves and additional information on those already published, is under preparation.

In the monograph, Gh. Diaconu has grouped the 286 graves he has published in three cemeteries: a Sarmatian inhumation cemetery, dated in the third century, a small Free Dacian cemetery, dated in the second half of the third century, and the big Černjachov cemetery, dated in the first three quarters of the fourth. The excavations through 1992 added to the graves published in 1965 other 163, bringing the cemetery to a total of 449 graves. From the unpublished graves, 16 inhumation graves are considered Sarmatian, raising the total number of the Sarmatian inhumation graves to 34.4 The total number of graves belonging to the Černjachov cemetery is now 415, from which 225 are inhumation graves and 190 are cremation graves. That is if we include in this number 8 cremation graves, considered by Gh. Diaconu to belong to the small Free Dacian cemetery. Anticipating the conclusions of the chronological analysis, this would make them contemporary with many of the cremation graves from the Černjachov cemetery and so, we have either to accept the contemporaneity of two different cemeteries in the same place, or to date those 8 graves earlier than the second half of the third contury, and we have no grounds to do that. It is far easier to accept them as a part of the Černjachov cemetery. Neither the artefacts found in these graves, nor the ritual, are so unlike those common for the cremation graves of the Černjachov cemetery to make the hypothesis of a separate cemetery probable.<sup>5</sup>

The legitimacy of this study, done only on a part of a whole, can be contested. The analysis of the cremation graves, separated from that of the inhumation ones, can create the dangerous illusion that they are independent of these, before a proper investigation of this important issue. Nonetheless, some facts suggest that a special study on the cremation graves could be useful. First, the reduced expressiveness of these graves, compared to that of the inhumation graves, has kept the attention of the archaeologists away, thus increasing the natural difference of informative potential characteristic for the two burial rites. Second, the cremation graves show attributes requiring an analysis conceived for them. One such attribute is the status of the costume accessories. When these are present in the cremation graves the functional link with the pieces of clothing is broken. It is no longer possible to make

<sup>1</sup> In 1986 I was included in the archaeological research team excavating the cemetery of Tîrgşor. This has enabled me to study the great majority of the artefacts found in the cremation graves and also to participate in the excavation of 14 of them. I am grateful to Dr. Gheorghe Diaconu and to Dan Lichiardopol for the generosity with which they have made available to me their knowledge and the results of their work. Dr. Radu Harhoiu, a former member of the research team of Tîrgşor, now head of the department for medieval archaeology of the Bucharest Institute of Archaeology, has been prodigal with his knowledge and insight, not only during the preparation of this work. Of course, all responsibility for what is faulty and misconecived in the following pages belongs to me.

<sup>2</sup> Gh. Diaconu, *Tirgşor. Necropola din secolele III-IV e.n.*, Bucharest, 1965.

<sup>3</sup> Gh. Diaconu, Dacia, N.S., 19, 1975, p. 263-266, where grave 321 is published and idem, SCIVA, 29, 4, 1978, p. 517-527, where

an urn from grave 333 and the inhumation graves 374a and 374b are published.

<sup>4</sup> Gh. Diaconu, Catalogul mormintelor de la Tirgşor (ms.); idem, Tirgşor. Necropola din secolele III-IV e.n., Bucharest, 1965, p. 19-29 has published 20 of the inhumation graves as Sarmatian graves. I have excluded 2 of them, 73 and 194, which I think belong to the Černjachov cemetery, for reasons explained below. I. Ioniţă, Archacologia Baltica, 7, 1986, p. 296, considers that only 11 graves from those published in 1965 are Sarmatian, admitting that some other inhumation graves are difficult to assign to either cemeteries.

<sup>5</sup> These are graves 16, 21, 22, 110, 147, 268, 271 and 272. Cf. Gh. Diaconu, op. cit., p. 33: "All the decoration forms and ornamentation techniques of the vessels from the Geto-Dacian cemetery in Tirgşor will be found in the Černjachov-Sîntana pottery." I. Ioniţă, op. cit., p. 307, considers the 8 cremation graves as belonging to the Černjachov cemetery.

DACIA, N.S., tomc XXXVII, Bucarest, 1993, p. 197-220

distinctions, like for the inhumation graves, between such artefacts deposed in their functional link with the funeral costume of the deceased, and those which might have had other functions, e. g. that of fastening a shroud, or might have been deposed as offerings.

The main hampering to the interpretation of the cremation graves from Tîrgşor is made by shortcomings of the anthropological analysis. The only one performed until now, that of D. Nicolăescu-Plopşor and Wanda Wolski, studies the graves published in 1965. Unfortunately, this analysis is not transparent enough to allow an independent evaluation of its results and offers nothing on the sex of the cremated individuals. Nonetheless, I will use the data published by these two researchers on the quantity of cremated bones present in 76 cremation graves.

I have started my analysis with an attempt to see if it is possible to discern one or more groups of cremation graves, determined by their topographical position in the cemetery. Doing this simply by observing the distribution of the cremation graves and determining their grouping in an intuitive and subjective manner, I have come to the impression that three such groups exist (Fig. 1)8, groups named with the letters "a", "b" and "c". These groups will be used for all the following steps of the analysis as representing areas of the cemetery, not clusters with clear boundaries. At this stage of the research they have only a heuristic and practical utility, allowing an easier description of the distribution of the cremation graves on the territory of the cemetery and having no other meaning than that of a spatial association. One objective way to verify the consistency of these groupings is to cluster the coordinates of the cremation graves with a K-means clustering procedure. I have used this analysis for three successive hypotheses, arguing for 2, 3 and 4 clusters (Figs. 2-4). The examination of these clustering possibilities leaves to be considered only 2, with 2 or 3 clusters, the last one being very close to my intuitive clustering. Knowing that the cemetery has been subjected to an important amount of destruction, mostly by an intensive late medieval inhabitation, it is reasonable to suspect that the topographical configuration of the cremation graves subjected to the analysis was built, at least partially, by this. From what the excavator was able to see, the destructions have affected mostly the southern part of the cemetery. The density of the remaining graves is high enough to let us believe that only few graves from the rest of the cemetery were destroyed. The most important area for the delimitation of the "a", "b" and "c" groups of cremation graves, an area situated east of "b", south of "a" and north of "c", is almost free of destructions. 10

Some indication on the grouping of the cremation graves can be given by the position of a special category of graves, the double graves. For the inhumation graves the definition of this category is simple, being based upon the presence of two skeletons. For the cremation graves, without a reliable anthropological analysis, this definition is based on the presence of two urns or of an urn and a compact aggregate of cremated bones. The available anthropological analysis indicates, for all the simple graves taken into account by it, a single individual. From the 3 double graves it considers, a single one, grave 112, contains the remains of two individuals, while the other two contain the remains of only one individual. The distribution of the double graves is not random. The 5 inhumation graves concentrate in the central area of the cemetery, while the 10 cremation ones are building three groups, two in the "c" area, and one in the "a" area (Fig. 5). I suggest the following interpretation. The double graves are an expression of a custom to depose together the remains of two individuals, probably related, in those accidental situations when their death occurred at the same time, or within a short span. So, we are to expect the number

Körperbestattung ausgeübt wurde." For the mapping of the graves belonging to his chronological phases see Figs. 7-8.

<sup>8</sup> All the mapping has been done with Freelance Graphics 1.0. The limitations of this very useful software make close points to overlap, an overlapping that unfortunately can create the impression of a superposition of graves.

<sup>&</sup>lt;sup>6</sup> Dardu Nicoläeseu-Plopşor, Wanda Wolski, Annuaire roumain d'Anthropologie, 6, 1969, p. 3–20 (in German), published also in Romanian (Apulum, 9, 1971, p. 735–752). Cf. idem, Studii şi cercetări de antropologie, 9, 2, 1972, p. 109–117. The disbelief provoked by this analysis is unfortunately increased by the fact that in the cited versions of this study, graves 110 and 147 are present both in table 1, with data on those graves considered by the authors as belonging to the Free Dacian cemetery, and table 2, with data on the cremation graves from the Černjachov cemetery. For these two graves the information contained in these tables is discordant. The cremated bones from grave 110 appear in table 1 as "representative", while in table 2 the same bones are characterized as "non-representative". The individual in grave 147 is maturus in table 1, adultus-maturus in table 2.

<sup>&</sup>lt;sup>7</sup> K. Horcdt, Siebenbürgen in spätrömischer Zeit, Bucharcst, 1982, p. 141-142, indicated the existence of at least 2 groups of cremation graves, "an die dann die Körperbestattungen anschließen". I. Ionită, op. cit., p. 308, accepts the initial existence of only one and considers the northern group to be "eine spätere Ausweitung der Bestattungen, zu einem Zeitpunkt (Beginn der II. Stufe) da die Brandbestattung noch ziemlich viel, jedoch zugleich mit der

<sup>&</sup>lt;sup>9</sup> This analysis was done using the statistical software SYSTAT 5.0. See L. Wilkinson, SYSTAT: The System for Statistics, Evanston, II., 1990, p. 38 for details on the algorithm. Cluster analysis assigns to clusters all the graves, including those with peripheral positions, which, as was frequently observed, may have a different chronological status than those closer to the centers of the clusters. The number of clusters as input, not output of the analysis, might come as a surprise to those believing that this procedure should generate nothing less than one objective classification. Cf. L. Wilkinson, op. cit., p. 35, "It is best to have a general idea of how many groups to expect...". Of course, I have started by letting the analysis produce an "objective" result. This was 16 clusters, with no significance visible to me.

<sup>10</sup> Sec Gh. Diaconu, op. cit., pl. 11.

<sup>&</sup>lt;sup>11</sup> D. Nicoläescu-Plopsor and Wanda Wolski, Annuaire roumain d'anthropologie, 6, 1969, p. 5-6, tab. 2.

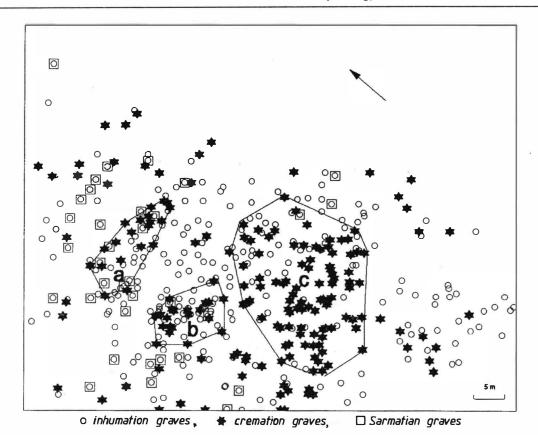


Fig. I. Intuitive clustering of the cremation graves.

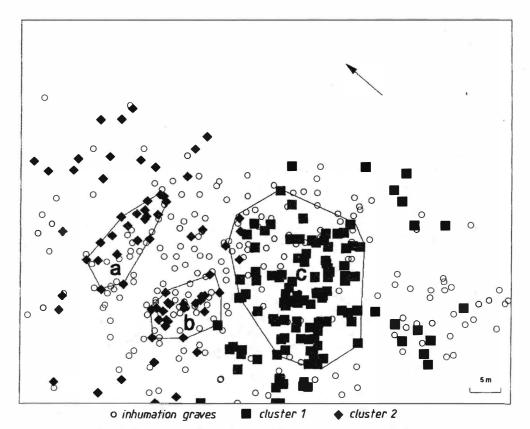


Fig. 2. K-means coordinate clustering of the cremation graves. 2 clusters.

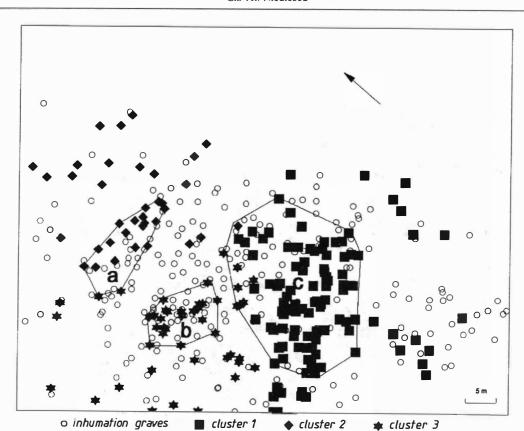


Fig. 3. K-means coordinate clustering of the cremation graves. 3 clusters.

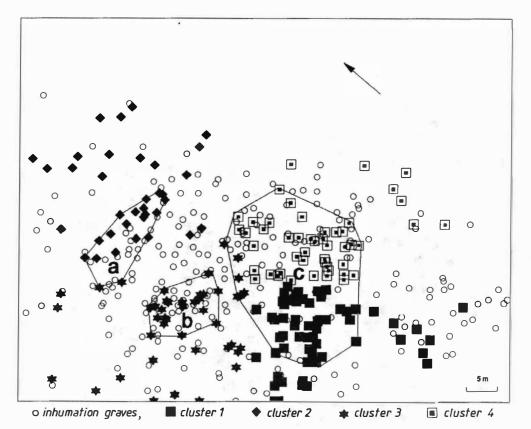


Fig. 4. K-means coordinate clustering of the cremation graves. 4 clusters.

of double graves to be roughly proportional to the total number of graves belonging to the population using them. Thus, if the "double" cremation graves are present in the "a" and "c" areas, this may indicate the existence of 2 groups of cremation graves in the cemetery of Tîrgşor.

An attempt to establish a chronology of the cremation graves, without using the far better information provided by the inhumation graves, is questionable. Although the present analysis considers all the 190 cremation graves from Tîrgşor, compared to the 109 published in 1965 (Fig. 6), it cannot use the majority of the chronological indicators and the pottery types found in the inhumation graves, that might have brought in the seriation cremation graves otherwise impossible to date.

A general chronology of the cemetery of Tîrgşor, based on a seriation of 79 graves, from which 24 are cremation graves, has been proposed by I. Ionită (Figs. 7-8). 12 Unfortunately, it has some shortcomings. The graves used for the seriation were not sexed. This is likely to determine an ordering of the graves according not to their chronological position, but to those categories of artefacts characteristic for male or female graves. 13 It seems that this is what happened. The costume accessories are not present among the types characteristic for the first chronological phase, while the last one is characterized by 10 types, of which at least 6 are costume accessories, including 4 bead types. 14 Some of the types used are questionable. I will not discuss the typology itself, just as empirical as the one used here, but only two types, characteristic for the first of I. Ioniță's chronological phases. The first one is a hand-made bowl, present in graves 25 and 55. This is not published by Gh. Diaconu in his monograph and belongs perhaps to the 150 unpublished vessels drawn by I. Ionită. 15 It has all the chances to belong to the Latène level, perforated by the graves of the Černjachov cemetery and giving, in some other cremation graves, typical fragments of decorated pottery. 16 The second is a type named by I. Ionită "viereckiger Ring", identified by him in graves 31 and 47. In this last grave, not only the iron piece is clearly different from the one in grave 31, but Gh. Diaconu clearly indicates that it is not possible to know if it belonged to the grave.<sup>17</sup> One last remark: grave 147 is situated by I. Ionita's analysis at the end of the second chronological phase, thus being in his opinion one of the latest cremation graves in the cemetery, although it contains an early type of fibula that will be discussed below.

For the chronological analysis I have used two methods: the dating with chronological indicators and the seriation of the cremation graves using only pottery types. The chronology proposed here should not be considered as a definitive chronology of the Tîrgşor cemetery. The seriation could take into account only a small number of graves and types. An analysis of all the finds from the inhumation graves will confirm or alter the results of the present analysis.

The chronological indicators selected here have a reasonably clear position in the European system of relative chronology. For the first phase of the cemetery the following are considered:

- 1. Glass bowl with faceted decoration (Fig. 9/1), type Eggers 216, found in grave 67, datable in C 2.18
- 2. Ceramic imitation (Fig. 9/2) of the glass bowl type Eggers 216, found in grave 361.
- 12 I. Ionită, op. cit., p. 316, tab. 1 and p. 344, fig. 27 with the seriation and the distribution of the chronological phases on the territory of the cemetery. A correlation between the relative chronology of the Tirgşor cemetery and the European system of relative chronology created by H.-J. Eggers and improved by K. Godłowski and J. Tejral is not attempted, although the graves published in 1965 contain enough chronological indicators. Cf. I. Ionită, Die Fibeln mit umgeschlagenem Fuss in der Sintana-de-Mureş-Cernjachov-Kul-nar, in Eldrid Straume and Ellen Skar (cd.), Peregrinatio Gothica III. Oslo, 1992 (Universitetes Oldsaksamling Skrifter. Ny rekke. Nr. 14), p. 77-90, where the studied fibulae are grouped in phases, correlated with the European chronology.
- 13 The Manual of *The Bonn Seriation and Archaeological Statistics Package. Version 4.1*, The Unkelbach Valley Software Works, n.d., p. 180, warns the users: "If the sexes are not separated prior to scriation, the results will often be two sets of finds which are linked to each other by the few types (usually ceramics) which are shared by the two groups. ... A scriation run on this data (data from the cemetery of Ruebenach) will show segregation into two linked groups, with males and females at opposite ends."
- 14 1. Ioniță, Archaeologia Baltica, 7, 1986, p. 316, Tab. 1. I have tried to verify this possibility with the anthropological data published by Gh. Diaconu, op. cit., p. 53-72, but they are too few to allow a conclusion. There are no sex determinations for the graves belonging to 1. Ioniță's first chronological phase, and the determinations for the 28 graves from the third one look like this: 11 children, 1 adolescent, 2 women, 2 men and 12 graves without determination of the sex. 1. Ioniță, op. cit., p. 314, considers the absence of fibulae

from the first chronological phase of the cemeteries of Tîrgşor, Budeşti and Ruzičanka as a feature of the dress customs.

- 15 I. Ioniță, op. cit., p. 296; cf. p. 316, Tab. 1. Among these unpublished drawings must be the bowl with three handles from grave 25. This artefact is not published by Gh. Diaconu and not to be found in the Tîrgşor magazine.
- <sup>16</sup> Such fragments, unpublished, have been found in graves 111, 112, 269 and 418.
  - 17 Gh. Diaconu, op. cit., p. 42 and pl. XXXIV/3.
- 18 G. Rau, Acta Praehistorica et Archaeologica, 3, 1972, p. 115-117, assigns this type to the end of the third century; J. Tejral, Archaeologia Baltica, 7, 1986, p. 181, assigns it to C 2. Ulla Lund Hansen, Römischer Import im Norden, Copenhagen, 1987, p. 109, argues for a C 1b dating for the Danish finds of this type, while L. Barkóczi, Pannonische Glasfunde in Ungarn, Budapest, 1988, p. 65-66, dates it in the third century. One of the most important assemblages containing this type is the second grave from Ostrovany, where it was associated with an aureus from Herennia Etruscilla (249-251); see Rau, op. cit., p. 183-184 with the older literature on this grave and the recent contribution of E. Krckovič, Zur Datierung der Fürstengräber der römischen Kaiserzeit in der Slowakei, in K. Godłowski and Rcnata Madyda-Lcgutko (cd.), Probleme der relativen und absoluten Chronologie ab Latènezeit bis zum Frühmittelalter, Kraków, 1992, p. 66, fig. 8. K. Godłowski, Die Chronologie der jüngeren und späten Kaiserzeit in den Gebieten südlich der Sudeten und Karpaten, in K. Godłowski and Renata Madyda-Legutko (cd.), op. cit., p. 37 dates this grave in the developed C 2.

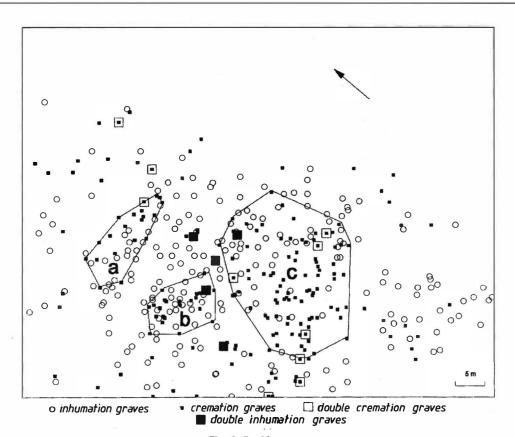


Fig. 5. Double graves.

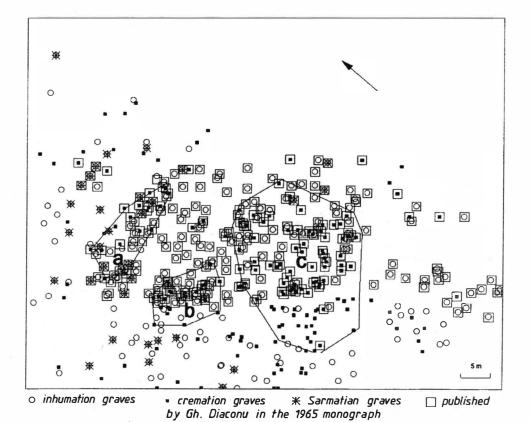


Fig. 6. Published and unpublished graves.

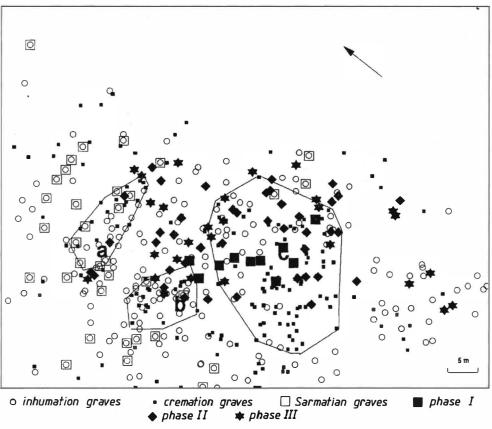


Fig.7. Chronology proposed by I. Ioniță.

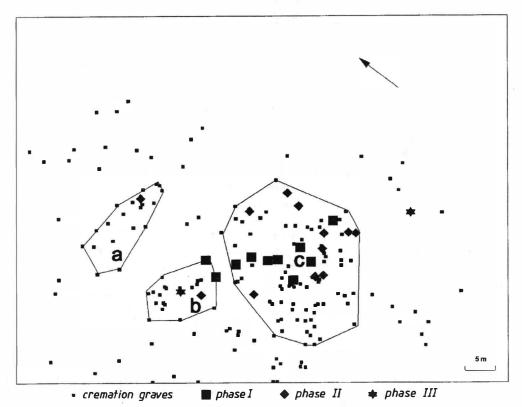


Fig. 8. Chronology proposed by I. Ioniță. Cremation graves.

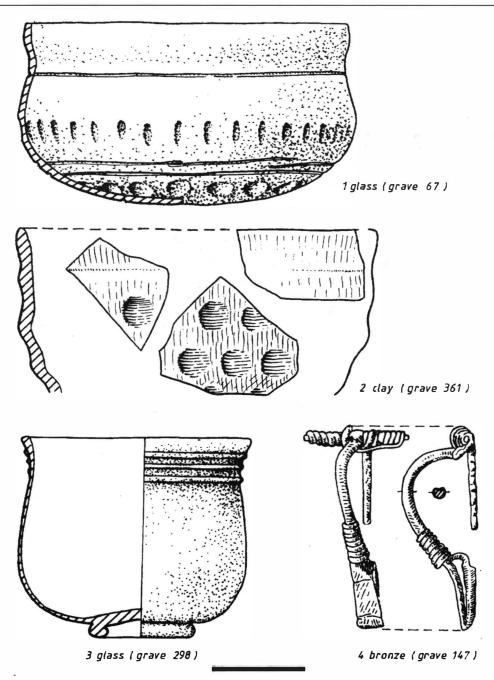


Fig. 9. Chronological indicators.

3. Tendril fibula from grave 147 (Fig. 9/4) whose analogies are dated in C2.<sup>19</sup> In the same grave a shield boss and a shield grip were found (Fig. 10/3-4), similar to finds typical for the seventh group of weapon graves from the Przeworsk culture, defined by K. Godłowski.<sup>20</sup>

19 This type of fibula is frequent in the second half of the third century in the Lower Danube region. See Gh. Diaconu, op. cit., p. 35 and Gh. Bichir, Geto-dacii din Muntenia în epoca romană, Bucharest, 1984, p. 50 and pl. XLI. I. Ioniță, Die Fibeln mit umgeschlagenem Fuss in der Sîntana-de-Mureş-Černjachov-Kultur, in Eldrid Straume and Ellen Skar (ed.), Peregrinatio Gothica III, Oslo, 1992, (Universitetes Oldsaksamling Skrifter. Ny rekke. Nr. 14), p. 77 and 82, includes the fibula from grave 147 in the category "Zweigliedrige Fibeln m. u. F. und verlängerter Spirale" assigned by him to the end of C 2 and C 3a.

<sup>20</sup> K. Godłowski, The Chronology of the Late Roman and Early Migration Periods in Central Europe, Kraków, 1970, p. 23–24, pl. III/2 and XXII, where this group was named the third horizon of weapon graves; cf. idem, Zamiany w uzbrojeniu ludności kultury przeworskiej w okresie wpływów rzymskich, in Arma et Ollae. Studia dedykowane Profesorowi Andrzejowi Nadolskiemu w 70 rocznicę urodzin i 45 rocznicę pracy naukowej, Łódź, 1992, p. 74 and fig. 4/1–8, where this horizon is redefined as the seventh group of weapon graves and dated from the end of C Ib to the beginning of C3. I am grateful to the author for the copy of this publication and for the German summary that allowed me a better use of it.

4. The glass vessel (Fig. 9/3) from grave 298, similar to that discovered at Werbkowice–Kotorów. The type is generally dated in C2 with the possibility that its existence continued in C 2/C 3.<sup>21</sup>

The latest datable cremation grave from Tîrgşor is grave 413, superposing grave 407, an inhumation grave with two fibulae with semidiscoidal plate (Fig. 10/2), assignable to C 3. The fragment of glass vessel (10/1), with unusually thin walls, decorated with hexagonal facets, found in grave 384, seems also to be later than C 2.

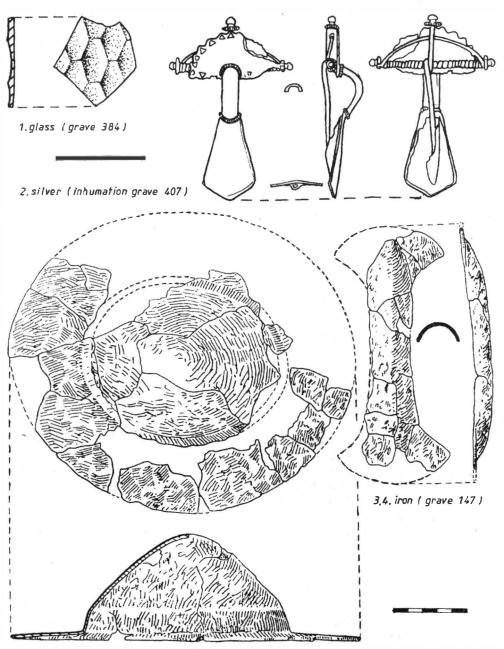


Fig. 10. Chronological indicators.

The seriation<sup>22</sup> could not, because of the known exigencies of the method, use more than 24 graves (Fig. 11); the separation of the chronological phases has been done by keeping for each of them as many characteristic types as possible. All the types used are pottery types (Figs. 12–15). Their names have a descriptive value. The first letters, w or h, stand for wheel-made or hand-made, the second, f or c, stand for the fabric, fine or coarse

<sup>&</sup>lt;sup>21</sup> G. Rau, op. cit., p. 119 with fig. 11 and p. 120 dates this around the year 300 and at the beginning of the 4th century. J. Tejral, op. cit., p. 181–182, considers it a C 2 type, even if it survives in C 2/C 3.

<sup>&</sup>lt;sup>22</sup> The scriation was performed with *The Bonn Seriation and Archaeological Statistics Package. Version 4.1.* For the Kammerer-Goldmann algorithm, modified by P. lhm, used in this package see the Manual published by the authors, p. 209–211.

## TYPES

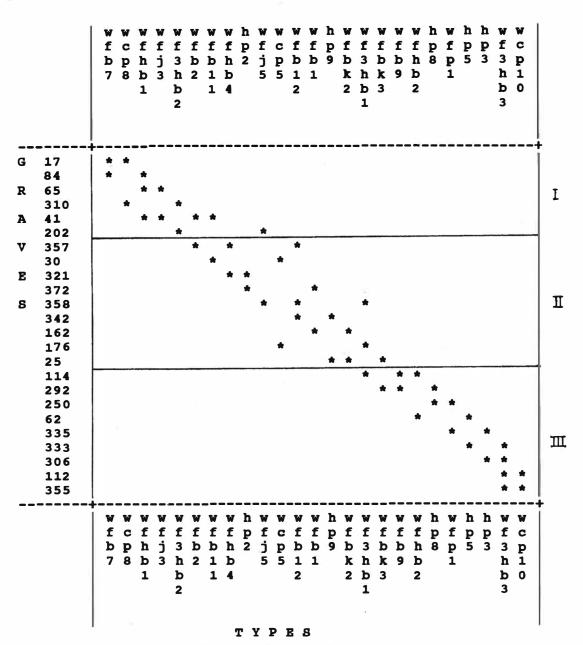


Fig. 11. Seriation of cremation graves.

(no such indication for the hand-made pots) and the following letters and numbers are designating the forms. The techniques used for decoration are the following: polishing, for wfj3 (Fig. 12/4), wfj5 (Fig. 12/8), wfb1 (Fig. 13/5), and wf3hb1 (Fig. 14/1), and stamping, for wfbk2 (Fig. 13/7) and wf3hb3 (Fig. 15/1). It would have been possible to use a bead type; I did not do it because of the reasons given above concerning the risks involved in seriating unsexed graves. Figure 16 represents the chronologically assigned graves, both those with chronological indicators and those dated by the seriation. In figure 17, to these graves have been added those containing types characteristic only for a single chronological phase. This has brought the number of graves dated by seriation to 48. The correlation between the chronological phases obtained by seriation and the chronological indicators is possible only for grave 67, containing the Eggers 216 glass bowl and a three handled bowl, type wf3hb2, characteristic for the first chronological phase (Fig. 12/5), and for grave 384, containing the fragment of a glass vessel decorated with hexagonal facets and fragments from a three-handled bowl, type wf3hb1 (Fig. 14/1). This type of vessel appears both in graves from the second chronological phase and the third.

At the end of the chronological analysis it can be concluded that the first cremation graves are not later than the middle of C 2. The earliest and the best studied chronological indicator used here, the glass bowl type Eggers 216 is generally assigned to C 2, but the three handled bowl (wf3hb2) associated with it in grave 67 appears in my seriation as being the most recent type from those characterizing exclusively the first chronological phase. Significantly, fragments from one or two Eggers 216 glass bowls were discovered in the Carpian settlement from Poieneşti.<sup>23</sup> The last datable cremation grave, 413, cannot be earlier than the end of C 3.

The distribution of the dated graves (Figs. 16-17) shows the following interesting features:

- 1. The graves from the first chronological phase appear in the "a" and "c" areas of the cemetery, and only in that part of "b" very close to "c".
- 2. Most of the graves from the second chronological phase are present in the "c" area, west of it, and in the "b" area. With one exception, they are missing from the "a" area.
- 3. The graves from the third chronological phase are present in the "a" and "c" areas, but missing in the "b" area.

Two burial areas, "a" and "c" appear to have a clear identity after this analysis, while "b" seems to be a contact zone between them. Area "a" has had a different history from that of the "c" area. The absence of the cremation graves assigned to the second chronological phase could be explained by a massive transition to inhumation in area "a", followed in the third phase by an at least partial comeback of the cremation rite. The chronological evolution sketched here is confirmed by the distribution of the pottery with polished decoration in the cremation graves. From the 14 graves included in the first chronological phase only two contain pottery with polished decoration, while in the second, from 17 graves, 7 have such pottery, and in the third, from 17 graves, none. The mapping of the vessels with polished decoration shows (Fig. 18) that almost all of them are in the "c" area, a fact that can be explained by the presence in this area of an important number of graves from the second chronological phase. The presence of only one vessel with polished decoration in the "a" area is to be explained by the almost complete absence from this area of the cremation graves belonging to the second chronological phase.

The chronology of the cremation graves presented here needs to be confirmed by a detailed analysis of the inhumation graves. However, my results can generate reserves towards the interpretation proposed by I. Ioniță: a first phase belonging exclusively to the cremation graves, a second one in which the inhumation becomes rapidly widespread, and a third in which: "es der Körperbestattung gelingt die Brandbestattung fast volkommen zu beiseitigen".<sup>24</sup> The analysis presented here demonstrates that the transition from cremation to inhumation was not so simple and that an at least partial return to cremation is present at the end of the cemetery. To this, it will be reminded that the last datable grave belonging to the Černjachov cemetery is cremation grave 413 and that the first grave we can place in time seems to be an inhumation one. This is grave 73, published by Gh. Diaconu as a Sarmatian grave, superposed by the cremation grave 67, containing the Eggers 216 glass bowl. Its only artefact is an iron buckle and it shows nothing to suggest its affiliation to a Sarmatian cemetery.<sup>25</sup>

The superpositions of the graves in the cemetery in Tîrgşor are likely to provide valuable information concerning its chronology. They are 50 (Fig. 19), including the Černjachov graves superposing Sarmatian graves. Two superpositions, involving only cremation graves, could have been used here: 174/178 and 353/357, and that only if one pair could be dated. Unfortunately, this is not the case. The big number of superpositions shows that the cemetery developed, to a certain extent, by reusing areas occupied by former burials. This explains why the chronological phases are not represented by exclusive areas. In the Černjachov cemetery of Tîrgşor, there are 11 cremation graves superposing inhumation graves, a rather high number, difficult to accommodate with the theory of a gradual transition to inhumation, while 14 inhumation graves are superposing cremation graves and other 6 inhumation graves contain cremated bones, probably from cremation graves they have destroyed.

The distribution of the cremation graves belonging to the first chronological phase shows an interesting relationship to the Sarmatian inhumation graves (Figs. 16–17). These graves are south of the "Sarmatian" burial area, and in its northern peripheral zones. An attempt to explain this situation can lead to a hypothesis, verifiable only after the study of the inhumation graves: the population using the "Sarmatian cemetery" is the same with that using the cremation graves from the first chronological phase of the Černjachov cemetery of Tîrgşor. I do not see an explanation for the early cremation graves developing on two sides of it, except that of a gradual developing

have been present in Muntenia from the end of the third century, but thinks that the majority of the Černjachov people have come here later than 315-317, in his opinion the years of the final defeat of the Carpians by Constantine the Great.

<sup>&</sup>lt;sup>23</sup> The context is a large pit with typical Carpian pottery (assemblage 1234; Dr. M. Babes, oral information, August 1993). Gh. Diaconu, SCIVA, 34, 2, 1983, p. 242, concludes that the beginning of the Sintana de Murcş-Černjachov culture, in its western area, is to be dated in the years A.D. 270–275, but recently (oral information, August 1993) he has reasserted his opinion that the Černjachov cemetery of Tîrgşor does not begin before A.D. 300. Gh. Bichir, op. cit., p. 94, accepts the possibility that some isolated groups could

<sup>&</sup>lt;sup>24</sup> I. Ioniță, Arheologia Baltica, 8, 1989, p. 182.

<sup>&</sup>lt;sup>25</sup> Gh. Diaconu, op. cit., p. 20. Recently, Gh. Diaconu (oral information, May 1993) has expressed his doubts about the Sarmatian affiliation of this grave.

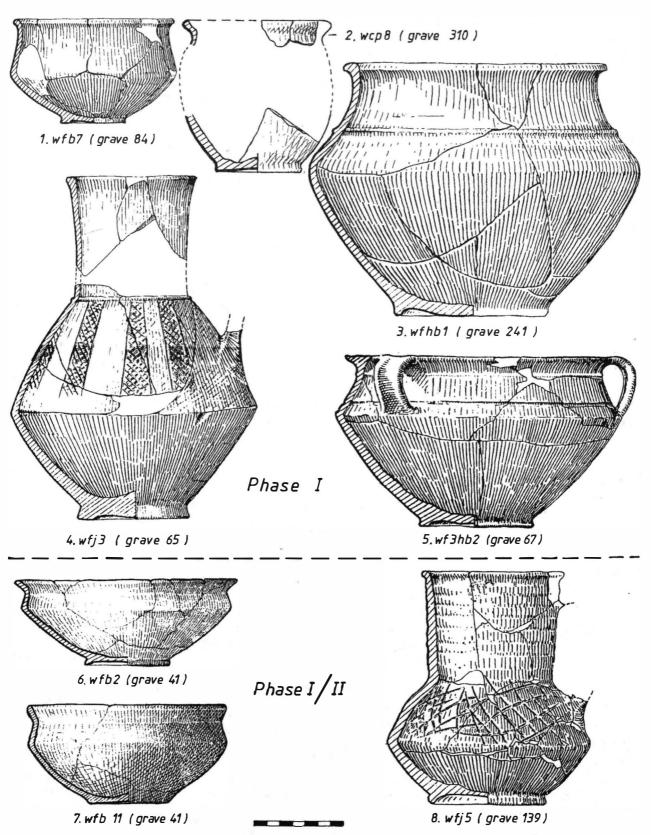
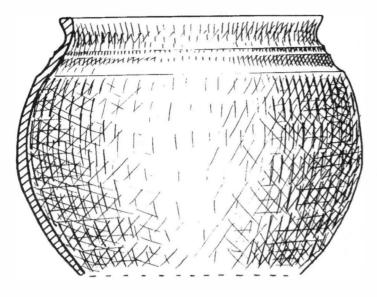
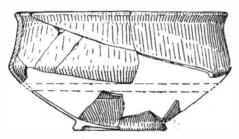


Fig. 12. Pottery types used in the seriation.

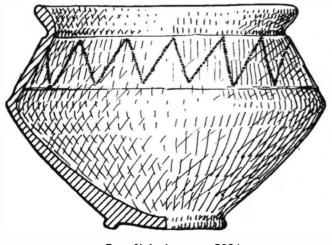


1. wfhb4 (grave 321)



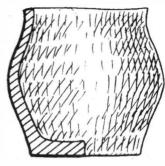
4.wfb12 ( grave 173)

Phase II



5. wfb1 ( grave 329)

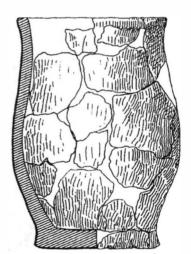
Fig. 13. Pottery types used in the seriation.



2.hp2 (grave 321)



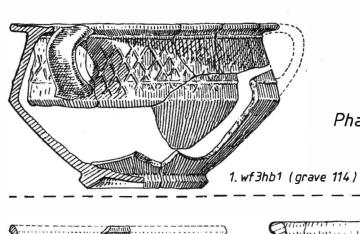
3.wcp5 (grave 30)



6.hp9 (grave 25 )



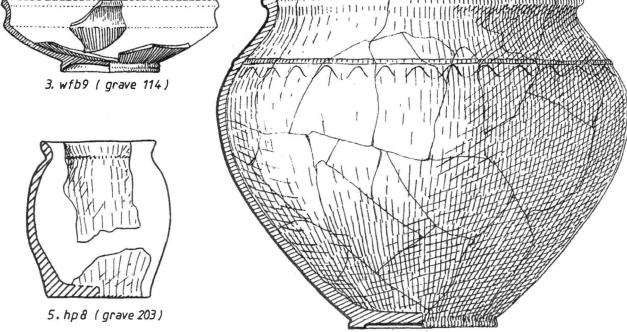
7. wfbk2 (grave 111)



Phase II/III



2. wfbk3 (grave 233)

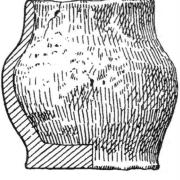


Phase III

4. wfhb2 ( grave 49 )



6. wfp1 (grave 335)



7. hp5 ( grave 62 )



8. hp3 ( grave 420)

Fig. 14. Pottery types used in the seriation.

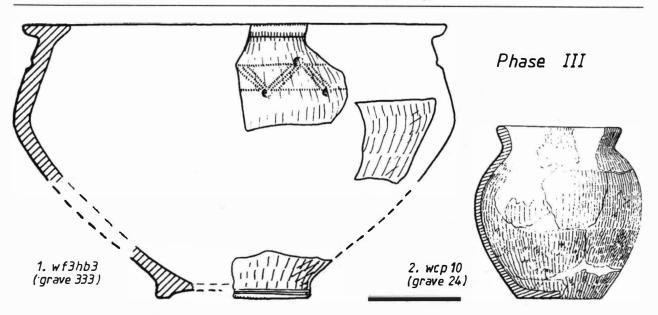


Fig. 15. Pottery types used in the seriation.

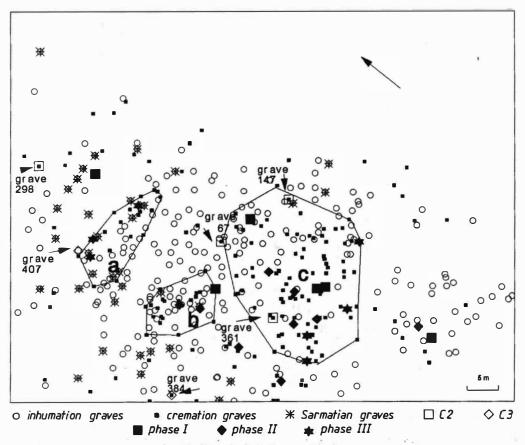


Fig. 16. Chronological phases and indicators.

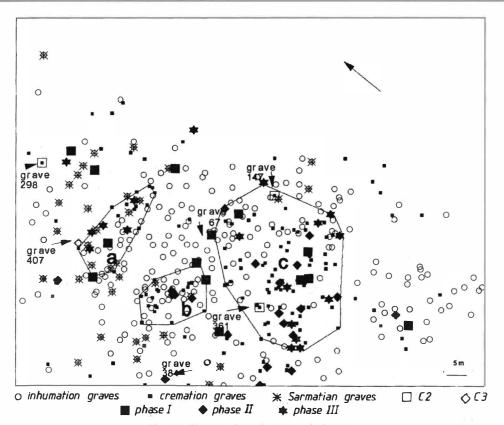


Fig. 17. Chronological phases and indicators.

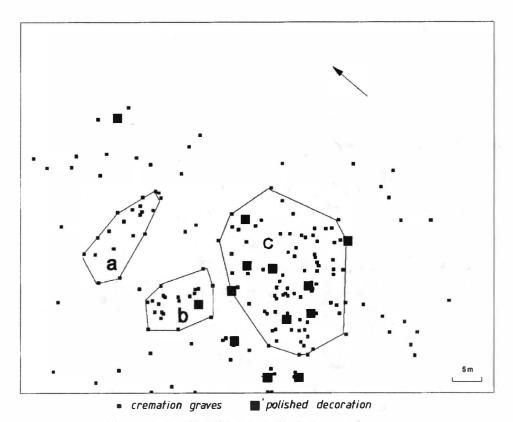


Fig. 18. Pottery with polished decoration in the cremation graves.

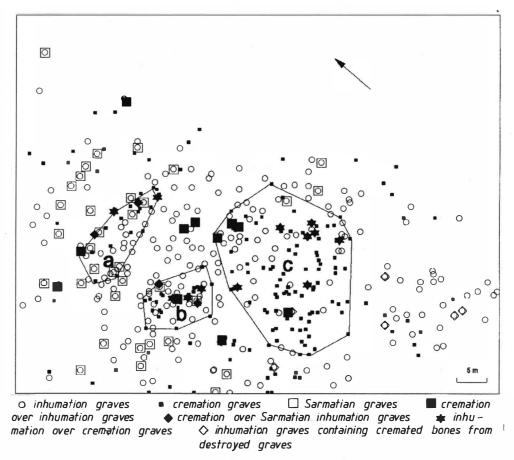


Fig. 19. Grave superpositions.

of the "Sarmatian cemetery" into the first phase of the Černjachov cemetery, with an at least partial change of the burial rite. It is not here the place to develop an argumentation for this hypothesis, in the absence of an analysis of the inhumation graves, but some facts deserve to be mentioned. Four of the dated cremation graves superpose inhumation graves considered in the 1965 monograph to be Sarmatian. Should these belong to the first phase, that would be an argument against my hypothesis, because if these graves had belonged to the same population, the closeness in time should have prevented the superpositions. But from the 4 cremation graves 2 are dated in the third chronological phase, one in the second and only one in the first. This is grave 67, dated at the end of my first chronological phase, superposing grave 73, already discussed above. Another grave should be reassigned. This is grave 194, published as Sarmatian after its partial excavation,<sup>26</sup> because of a bronze bell, considered to be a "Sarmatian" find. Its complete excavation has brought two tendril fibulae, very common in the Černjachov cemetery. It is possible that the distinction between the Sarmatian graves and the Černjachov cemetery is more chronological than ritual. The Sarmatian characteristics present in the published graves from the Sarmatian cemetery in Tîrgşor are few. Mostly artefacts, like great numbers of beads discovered in the area of the legs, mirrors, some specific hand-made pots. Ritual characteristics, like niches, special positions of the legs, are missing. All the published graves from the Sarmatian cemetery are north-south oriented, like the inhumation graves from the Černjachov cemetery. The Sarmatian cemetery was dated by Gh. Diaconu "at the middle and in the second half of the 3rd century,"27 in the same time span as the beginning of the cremation graves in the cemetery of Tîrgşor following the chronology presented here.

The analysis of the burial ritual in the cemeteries of the Černjachov culture is frequently done as a hierarchical classification, starting from what is considered to be the most important ritual element: the presence or absence of the urns. Then the analysis continues with the separation in further groups, characterized by the presence or absence of the covers for the urns, and so on.<sup>28</sup> A multivariate analysis of the ritual elements would

Pogrebenija s sožženjami na černjachovskich mogil'nikach, in E.A. Symonovič and N.M. Kravčenko, Pogrebal'nye obrjady plemen černjachovskoj kultury, Moscow, 1983, p. 47, tab. XIX.

<sup>&</sup>lt;sup>26</sup> Gh. Diaconu, op. cit., p. 20.

<sup>&</sup>lt;sup>27</sup> Gh. Diaconu, op. cit., p. 29.

<sup>&</sup>lt;sup>28</sup> An example of such a classification by N.M. Kravčenko,

be more appropriate. Thus it would be possible to detect recurrent associations related to characteristics of the population using the cremation rite. But for this analysis one must isolate those elements showing a variability linked with that of the biological characteristics of the deceased and those showing a chronological variability. Only chronological affiliation is attainable at this stage, and that only for nearly a quarter of the cremation graves. That is why my analysis will not go beyond an attempt to verify if some ritual elements show a variability in time and some observations on their distribution on the territory of the cemetery. A full analysis will be attempted after further work on the chronology of the cemetery, using the inhumation graves, and a new anthropological analysis.

The following elements will be taken into consideration: the presence or absence of urns, the presence or absence of covers, the conservation state of the urns, the categories of vessels used as urns, the position of the cremated bones in the graves, the quantity of cremated bones, the presence or absence of remains from the funeral pyre, other than cremated bones, and the presence or absence of artefacts having a function different from that of urn or covering. For this part of the analysis only the 48 dated graves can be used. For some ritual elements even less, because of the unclear or missing observations.

As I have mentioned before, from the 415 Černjachov graves 15 are double graves: 5 inhumation and 10 cremation graves; the higher proportion of cremation graves could be explained by the fact that some of them contain the remains of only one individual.<sup>29</sup> Although the double cremation graves should be well dated, because of the greater number of artefacts they contain, only five could be assigned to one of the chronological phases. They are missing from the first chronological phase, 3 belong to the second and 2 to the third. These graves will not be considered during the analysis of the ritual elements because it is not possible to compare single graves with them in analysing most of the ritual elements.

From the 180 graves left in the analysis, 129 (71.6%) are urn graves and 31 (17.2%) have the bones placed directly in the pit. For 20 (11.1%) it was not possible to discern if the grave was an urn grave or not, mostly because of the preservation state. The proportion of urn graves is superior to those calculated by G.F. Nikitina for Černjachov cemeteries of similar dimensions.<sup>30</sup> There is no significant chronological variability in the use of urns and no remarkable distribution on the area of the cemetery, except the fact that the urnless graves seem to be more frequent in the "c" area (Fig. 20). Some graves, made only of a few scattered cremated bones and some fragments of pottery, and with no visible traces of destruction, together with some of the graves with no artefacts, cluster in the southern part of the "c" area. This might not be an effect of pure chance. In the same area a small surface (19A) was excavated, where grave 422 was found. Here a layer of cremated bones and fragments of pottery with secondary firing was observed on a three square meters surface, but it was not possible to see any pit or any grouping of artefacts and cremated remains allowing us to identify other graves than that already mentioned. Nor were any later destructions observed. It is possible that what we have here is a particular ritual, whose material expression appears to the archaeologist like destroyed graves, lacking urns or significant bone clusters.

From the urn graves, 72 (55.8% of the intact graves) are covered and 57 (44.2% of the intact graves) are not covered. From the intact urnless graves, 12 (38.7%) are covered and 19 (61.3%) not covered. The custom to cover the urns is not equally represented in the three chronological phases. In the first one 9 urns are covered and 1 not, in the second 4 are covered and 4 not, and in the third 8 are covered and 3 not. The graves in which the custom of covering the urns or the cremated bones is not present are concentrated in three major areas (Fig. 21). One in the southern part of "c", another in the middle of "b" and the third north of "a". Several such graves appear also in the peripheral zones of the cemetery. The situation observed in "b" seems to confirm the hypothesis that the cremation graves are concentrated in two groups and that in this group we have the limit between the "a" and "c" areas.

I have reduced the characterization of the conservation state of the urns to three descriptive terms: intact, half of a vessel, and deteriorated. The deteriorated urns are generally better preserved in the lower half than in the upper, but among the fragments from this last one there are always portions of the rim. Many such urns look like the upper part of the vessel was broken and used to cover the lower part.<sup>31</sup> Considering for this analysis only the urns coming from intact graves, it appears that in the first chronological phase 5 urns are intact, 4 deteriorated and one made of the lower half of a vessel. In the second, 3 urns are intact, 2 deteriorated and 2 made of half

<sup>&</sup>lt;sup>29</sup> For the definition of the "double graves" see above, p. 198. <sup>30</sup> G.F. Nikitina, Sistematika progrebal nogo obrjada plemen černjachovskoj kul tury, Moscow, p. 32, fig. 9. Similar proportions between urn graves and pit graves are to be found only in the cemeterics from Osclivka (89 graves), Ostrovec (16 graves), Rakovec-Česnovskij (18 graves), Maslovo (91 graves) and Kamenka (12 graves).

<sup>&</sup>lt;sup>31</sup> This is just a supposition based on the conservation state of the urns, observed in the magazine, not *in situ*. From the cremation graves to whose excavation 1 participated since 1986, not a single one showed such a manner of covering. A single situation of this type was recorded by Gh. Diaconu for grave 314; cf. idem, *Catalogul mormintelor de la Tirgsor* (ms.)

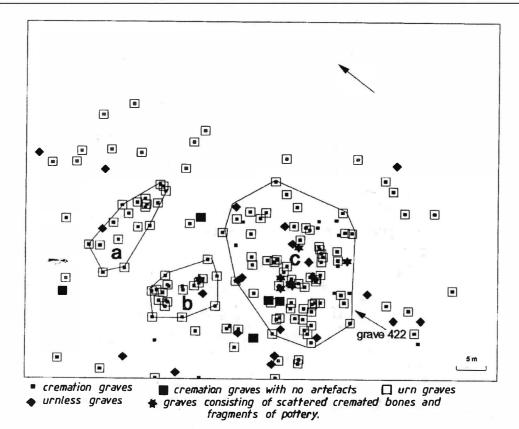


Fig. 20. Urn and urnless graves.

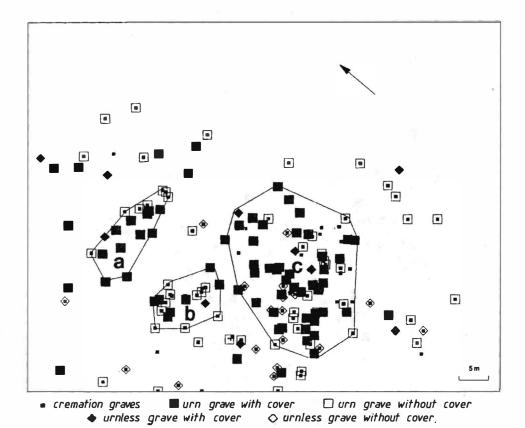


Fig. 21. Graves with and without cover.

20

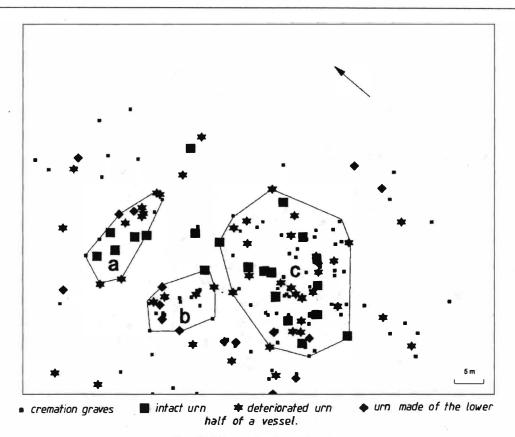


Fig. 22. The conservation of the urns.

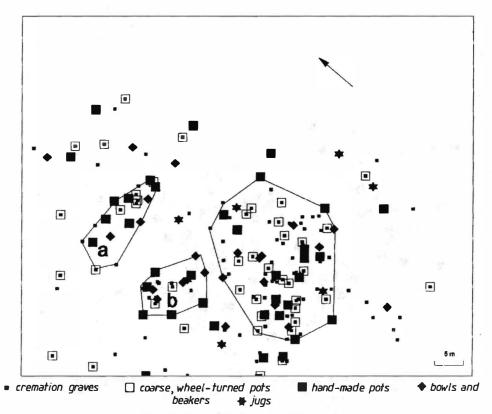


Fig. 23. Categories of vessels used as urns.

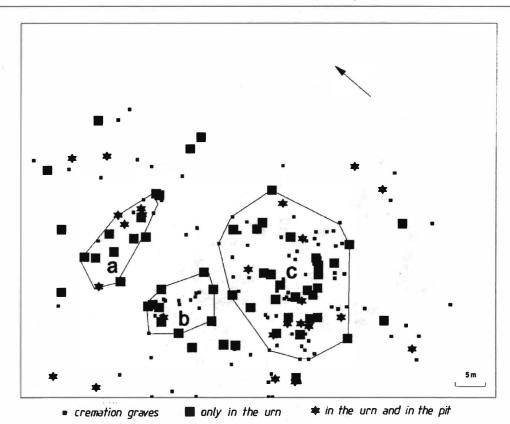


Fig. 24. Position of the cremated bones in the graves.

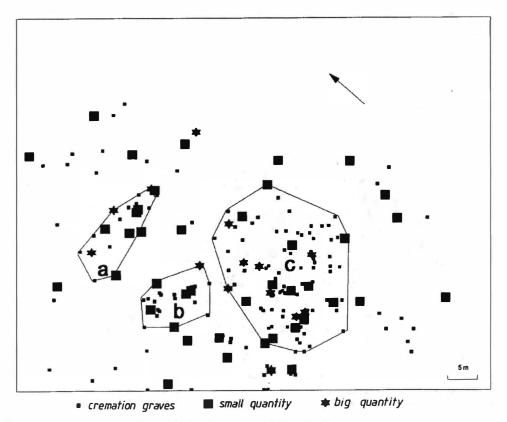


Fig. 25. Quantity of cremated bones in the graves.

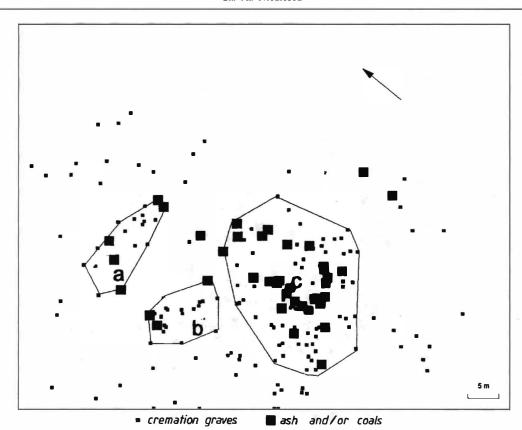


Fig. 26. Remains from the funeral pyrc.

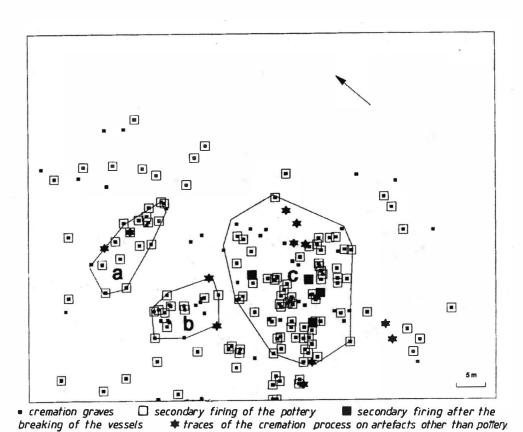


Fig. 27. Effects of the cremation on artefacts.

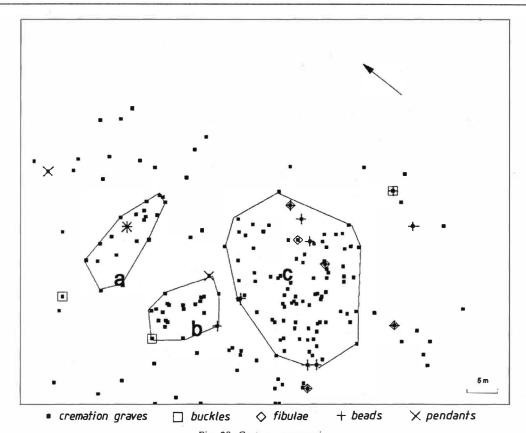


Fig. 28. Costume accessorics.

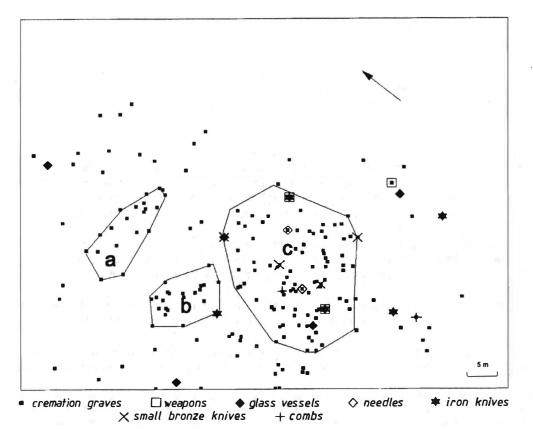


Fig. 29. Weapons, glass vessels and minor finds.

vessels, and in the third, 2 urns are intact and 8 deteriorated. Thus in the third phase the number of the deteriorated urns is 4 times greater than that of the intact ones while in the other 2 phases both types of urns appear in similar numbers (Fig. 22).

A chronological variability appears also for the categories of pottery used as urns (Fig. 23). Comparing the use of pots as urns with the use of other forms we can see that in the first chronological phase 5 urns are pots and 5 belong to other forms while in the third 11 are pots and only 3 belong to other forms. The technological attributes of the pots used as urns also show a chronological variability. In the first phase 3 of the pots used as urns are wheel-turned and made of coarse fabric and only one is hand-made. In the third, 2 are wheel-turned and coarse, while 8 are hand-made.

The position of the cremated bones in the graves (Fig. 24), described only for 70% of the dated graves, shows some differences between the second and the third chronological phases. In 3 graves from the second, the cremated bones were placed only in the urns and in 2 both in the urn and the pit. In the third phase, 6 graves have the cremated bones only in the urns and only one both in the urn and the pit. The most common explanation for the deposition of the cremated bones both in the urn and in the grave is that this occurred when the quantity of the bones exceeded the capacity of the urn. The information we have on the quantity of cremated bones is of poor quality and too scarce to be used for the testing of this assumption.

The quantity of cremated bones was independently appreciated by the excavator, Gh. Diaconu, using a series of describers, mostly related to the capacity of the urns (Fig. 25), but without measurements of their capacity (1/3 of the urn, half of the urn and so on). These indications are too few for the dated graves to allow any conclusion on their chronological variability. The authors of the anthropological study<sup>32</sup> use 2 descriptive terms to characterize the quantity of cremated bones: "representative" and "non-representative", rendered in the German translation they have published by "vertretend" and "symbolisch". The expected correlations between the two sets of observations are weak: 4 of the graves described by the archaeologist as having their urns filled with cremated bones appear as "non-representative", and 4 graves described by the archaeologist as having very few cremated bones are considered by the anthropologists as "representative"; only three "representative" graves having a bigger quantity of bones in the archaeological description.

Another ritual element showing a chronological variability is the presence in the grave of the remains (ash and coals) from the funeral pyre (Fig. 26). In the first phase 4 of 10 intact urn graves have such remains while in the third a single one of 14 intact urn graves.

Much has been written and much more discussed on the problem of the secondary firing of the pottery in the cremation graves from Tîrgşor. The examination of the majority of the pottery coming from the cremation graves convinced me that this ritual element has a distinct individuality. There are problems with the distinction between secondary firing during the uses in the household and that provoked by the funeral pyre. Not so difficult for the fine gray pottery, not conceived to be exposed to fire in the household. There are also some situations, when adjacent fragments from the same vessel show different colors, thus documenting a secondary firing when the vessel was broken, most probably in the funeral pyre. The presence in the funeral pyre is certain for the costume accessories touched by fire. A mapping of these last two characteristics shows a concentration in the "c" area (Fig. 27).

An analysis of the distribution of the artefacts in the intact cremation graves, even without the determination of the sexes can offer some information on the ritual. While no chronological variability is evident in the deposition patterns of artefacts other than urns and covers, some differences are apparent between the areas "a" and "c". All the graves with beads (with one exception), all the graves with fibulae, with iron knives, small bronze knives, needles, combs and all the weapon graves are situated in the "c" area. (Figs. 28–29).

The main conclusions of this study are the following:

- 1. The cremation graves from Tîrgşor are grouped in two areas, "a" and "c", beginning and ending their existence at roughly the same time, but with different histories and with some ritual specificities.
- 2. The beginning of the cremation graves in Tîrgşor can be dated in C 2, well before its end, probably between 260 and 275.
- 3. The relation between cremation and inhumation is less simple than generally assumed. Cremation was used until the end of the cemetery, and in the "a" area, much more in the third chronological phase than in the second one.
- 4. The ritual remains still to be interpreted; a chronological variability for some, a chorographic one for other ritual elements can be observed, but for a full interpretation a new anthropological analysis is needed.

the first grave the body is "non-represented" and the skull "represented" while for the other two the body is "represented" and the skull "non-represented." In grave 44 only fragments from the skull are present and in grave 250 no human cremated bones were found.

<sup>&</sup>lt;sup>32</sup> D. Nicoläescu-Plopsor and Wanda Wolski, Annuaire roumain d'anthropologie, 6, 1969, p. 4-6 and tab. 1-2. Some unusual situations are observed in this study. In graves 39, 139 and 156, belonging to adults, the skull had a treatment different from the body. For