SUMMARY

A. Evolution of scientific and professional careers

- I. General data
- II. Scientific activity
- II.1. Themes, Conception and Historiographic current
- II.2. Research themes continuity and novelty
- II.2.1. Feldioara / Marienburg
- II.2.2. Bratei
- II.2.3. Archeological reflection of colonization groups in Transylvania
- II.2.4. Burial habits in the area between the Lower Danube, Carpathians and Dniester, in the 10th-13th centuries
- II.2.5. Archaeological research of the components of medieval civilization in The Wallachian country
- II.2.6. Studying artifacts
- II.2.7. Production of pottery
- II.2.8. Archaeological reflection of the beginnings of Wallachia
- II.3. Editing and popularizing
- III. Directions and research perspectives

B. Turanic burials in the area between the Lower Danube, Carpathians and Dniester, in the 10th-13th centuries (Abstract)

- I. Brief history of the research
- II. General observations
- III. Categories of burials
- III.1. Category Ia. Graves with deposition of horses or certain parts of horses
- III.2. Category Ib. Graves with weapons and / or armor and harness pieces
- III.3. Category Ic. Graves with a different kind of inventory
- III.4. Category Id. Graves without inventory
- III.5. The synthesis of burial categories
- IV. Observations and comments concerning the analyzed categories
- V. About artifacts
- VI. Overview of the territories from the east of the Dniester
- VII. Instead of conclusions
- The catalogue of funerary discoveries
- Literature
- Annexes

The paper is structured in seven major chapters, complemented by a catalogue of funerary discoveries, literature and annexes. Chapter I. – *Brief history of the research*, include a concise excursus regarding the main papers about the research of the burials in the barrows / *tumulus* / *kurgan* (containing the Turanic graves) situated in the area between Lower Danube, Carpathians and Dniester. The first excavations with archaeological character in the region (on the Dniester River banks) were taking place in the late 19th century. Since then, the documentary base has grown (especially between 1970-1990) and despite the fact that the subject has been approached in various ways, there is a need for an archaeological synthesis, in which all funerary finds known at the present stage of research are illustrated and discussed. The assembly and ordering of funerary discoveries by certain criteria is also one of the purposes of this paper.

The second chapter – *General observations*, includes primary dates about Turanic burials, as well as the conditionings, territorial and chronological limits of the approached phenomenon. The choice of the working area is mainly due to the territorial extension of this mortuary phenomenon – the territory between the Carpathians, the Lower Danube and the Dniester, representing the western end of the habitat of the last Turanic migrants. Chronological limits lie between 896 – the conventional date of the departure of the Hungarians from Atelkuzu to Pannonia and the arrival of the Petcheneks in the northern Pontic steppes – and the reign of Tokta (1290-1312), the last Mongol / Tatar Khan that displayed religious tolerance for beliefs and funeral habits of the populations of the Golden Horde.

So far we know 573 graves, which can be attributed to the Turanic nomads from the 10th-13th centuries, spread across 157 sites from the area between Lower Danube, the Eastern Carpathians and the Dniester, resulting in an average of 3.6 tombs per location. Eight of these tombs are double, and six cenotaphs. All are inhumation graves and almost without exception are situated near rivers or lakes. Of the 573 graves (with 581 individuals, counting one individual also for the six cenotaphs), 288 graves (with 295 individuals) are without inventory (50.26%); 282 graves (with 283 individuals) have inventory (49.22%); three graves with unknown status (0.52%), which can be part of any category with or without inventory. In the inventory graves we have a separation between those who have horses or certain parts of horses motivated mainly by the importance of the role played by the horse in the life of the Turanic nomads – and the other tombs. Among these, we then made a separation of graves containing weapons and / or armor and harness pieces from those with a different kind of inventory. The following situation resulted: 114 graves have horses or certain parts of horses (19.90% of all graves and 40.43% of inventory tombs); 79 graves have weapons and / or armor and harness pieces (13.79% of all graves and 28% of inventory tombs); 89 graves (with 90 individuals) have a different kind of inventory (15.53% of the total graves and 31.56% of inventory tombs). Percentages may also be affected by the unclear situation of some graves, but this is generally the statistical trend.

Chapter III. – *Categories of burials*, is divided into five parts, the first four being dedicated to the established categories, and the last is a synthesis of these categories. There were analyzed for each category: the density of burials per sites and per barrow; the character of the research; the type of burial; the possible destruction or disturbance; ritual elements – the pits and funerary structures (for example pits with steps, wooden constructions, coffins), the body position, the position of the arms and legs, the orientation; the offerings consisting of the remains of the horse; the inventories. Osteological remains were quite rarely subjected to anthropological examination; however they are mentioned in some cases (approximate 19%). A funerary standard was established, and finally, with all the necessary reserves, a chronological grading of graves was attempted, using mainly the chronology of G. A. Fedorovy-Davydov. According to him, the epoch falls into four major chronological phases that correspond to the periods of domination of the northern Pontic steppe by various populations: I. the end of the 9th - 11th centuries (Petcheneks and other Turks – Uzes, Berendes); II. the last quarter of the 11th - 12th century (Cumans / Polovtsy / Kipchak); III. the end of the 12th century - the middle of the 13th century (Cumans before the Mongols); IV. the second half of the 13th centuries (Cumans, the "black skull-caps / khlobuks", Alans / Jas during the Golden Horde).

III.1. Category Ia. Tombs with deposition of horses or certain parts of horses. The 114 graves in this category are spread in 79 sites, resulting in an average of 1.4 tombs per location. Most graves – 67 – were revealed as a result of salvage excavations; 34 during systematic research; and 13 are fortuitous finds. In 92 cases, for funerals, there were used the olds barrows (in 60 sites), in 13 cases various mounds; seven graves are flat or seem to be flat, and for two we do not know the situation.

The shape of the pits was identified (and specified) in 42 cases (36.85%). The rectangular pits with more or less rounded corners are the most frequent -29 cases (70.73%); 12 pits are oval (26.83%) and one is trapezoidal (2.44%). The position of the deceased is lying on the back, with one exception where the skeleton is crouched laterally on the left side. The position of the arms was established for 68 graves (62.38%), for the other five graves due to the disturbances suffered, only the position of one arm was noted. Seven arm positions were recorded, the most common being: arms stretched alongside the body -38 graves. The position of the legs was established for 70 graves (64.22%). The legs in most tombs -62 – are stretched (90%), except for seven tombs where the legs are in five other positions. Orientation was established for 99 graves. Including slight deviations, the most common orientation is W-E in 69 of the cases (69.70%).

Depending on the type of offering deposited in the grave four groups were identified: I. tombs containing an entire horse skeleton: 10 graves in 7 sites (8.77%); II. tombs containing a horse skull and the extremities of the horse's legs: 71 graves in 54 sites (62.28%); III. tombs containing a horse skull: 15 graves in 13 sites (13.15%); IV. tombs containing the extremities of the horse's legs: 10 graves in 10 sites (8.77%). In addition, there are also 8 graves in 7 sites where horse parts were found without any specifications (7%),

either due to the discovery conditions or the deficient way in which the tombs were published. Several positions of the offering were found in the grave, these being analyzed for each group, most of them -11 – occurring in group II.

Of the 114 tombs in this category, 101 (88.59%) contained inventory pieces, the other 13 contained only the horse remains. Inventory pieces were analyzed in terms of the frequency in graves and after the function of the objects. Nine groups were established as follows:

- I. Harnesses: 1. bits (59 graves); 2. stirrup (19 graves) 3. *psalia* (two graves); 4. metallic ornaments for the harness (two graves); 5. metallic seals on the saddle ends.
- II. Weapons and military equipment: 1. knives (40 graves); 2. arrowheads (26 graves) 3. worked bone plates most coming from parts of the bow (14 graves); 4. swords / sabres (11 graves); 5. daggers (seven graves); 6. quiver (seven graves); 7. armor pieces (five graves); 8. lance / spear heads (four graves) 9. axes (two graves); 10. helmets (two graves); 11. bow holster.
- III. Ornaments and clothing accessories: 1. buckles (27 graves); 2. earrings (13 graves); 3. pendants (eight graves); 4. beads (five graves); 5. metallic decorative plates for a belt or clothing (four graves) 6. digital rings (three graves); 7. bracelets (two graves); 8. button.
- IV. Tools: 1. strike-a-lights (14 graves); 2. flint (12-13 graves); 3. spindle whorls (three graves); 4. scissors (two graves); 5. whetstone; 6. piercing bone; 7. awls.
 - V. Recipients: a. ceramic (seven graves); b. metallic (two graves); c. wood (two graves).
 - VI. Gaming pieces: knuckle-bone (astragalus) (three graves).
 - VII. Coins (one grave)
- VIII. Various pieces: 1. iron rings without specified function (nine graves); 2. iron nails (three graves); 3. small handles (iron, copper, bone) (three graves) 4. iron clamps (two graves) 5. bell; 6. horseshoe; 7. padlock; 8. round and elongated iron object (mace?); 9. bronze bar; 10. elongated iron object with a copper plate attached; 11. object of iron bent at one end (iron lighter fragmentary?); 12. circular bone object (button?); 13. bone object with a straight part and another oval section without a specified function; 14. cylindrical bone object perforated at one end.
- IX. Other: 1. fragmentary iron objects whose function can not be specified (22 tombs); 2. pieces of textile (seven graves); 3. pieces of leather (three graves); 4. thin sheets of gold (two graves); 5. teeth of wild pig.

Only 20 graves were analyzed from an anthropological point of view, 13 of them belonging to men, three, probably to women, four to children and teenagers, and five are cenotaphs.

Following the analysis, a standard ritual can be revealed: inhumation, barrow, secondary graves, rectangular pit, laid out on the back, arms along the body, legs straight; orientation W-E; the offering

consisting of the horse's skull and the extremities of the horse's legs, situated to the left side of the deceased. The inventory, considering only those pieces that are found in at least 10% of graves, would consist of: bits, knifes, buckles, arrowheads, stirrups, strike-a-lights, flint, worked bone plates, earrings.

Starting from the aforementioned periodization adapted to our area, the graves previously analyzed could be as follows: phase I - 11 graves; phases I-II - 58 graves; phases II-III - 25 graves; phase IV - 13 graves. Six graves can be framed anywhere in phases I-IV, while a grave can belong to any of the four chronological phases but also to another historical age.

III.2. Category Ib. Graves with weapons and / or armor and harness pieces. The 79 graves in this category are spread in 55 sites, resulting in an average of 1.4 tombs per location. Most graves – 59 – were revealed as a result of salvage excavations; 10 (probably) during systematic research; and 10 are fortuitous finds. In 66 cases, for funerals, there were used the olds barrows (in 44 sites), eight graves are flat or seem to be flat, and for five we do not know the situation.

The shape of the pits was identified (and specified) in 36 cases (45.56%). The rectangular pits with more or less rounded corners are the most frequent – 19 cases (52.77%); 11 pits are oval (30.55%), five are trapezoidal (13.88%) and one has an end rectangular and the other oval (2.77%). The position of all deceased is lying on the back. The position of the arms was established for 57 graves (72.15%), for the other four graves due to the disturbances suffered, only the position of one arm was noted. Six arm positions were recorded, the most common being: arms stretched alongside the body – 41 graves (71.92%). The position of the legs was established for 63 graves (79.74%). The legs in most graves – 59 – are stretched (93.65%), except for four graves where the legs are in three other positions. Orientation was established for 69 graves. Including slight deviations, the most common orientation is W-E in 33 of the cases (47.82%), followed closely by the N-S orientation with 28 cases (40.57%).

Inventory pieces were analyzed in terms of the frequency in graves and after the function of the objects. Eight groups were established as follows:

- I. Harnesses: 1. bits (10 graves); 2. stirrup (eight graves) 3. psalia.
- II. Weapons and military equipment: 1. arrowheads (45 graves); 2. worked bone plates most coming from parts of the bow (27 tombs); 3. knives (23 graves); 4. quivers (eight graves); 5. daggers (six graves); 6. swords / sabres (five graves); 7. lance / spear heads (three graves); 8. axes (two tombs); 9. armor pieces (two graves); 10. helmet.
- III. Ornaments and clothing accessories: 1. buckles (14 graves); 2. metallic decorative plates for a belt or clothing (10 graves); 3. earrings (eight graves); 4. buttons (six graves); 5. pendants (three graves); 6. beads (two graves); 7. digital rings (?).

IV. Tools: 1. strike-a-lights (12 graves); 2. flint (nine graves); 3. whetstone (three graves); 4. awls; 5. drill-press.

V. Recipients: a. ceramic (one grave); b. metallic (one grave).

VI. Gaming pieces: knuckle-bone (astragalus) (two graves).

VII. Various pieces: 1. iron rings without specified function (nine tombs); 2. clamps (four graves); 3. iron rivet; 4. padlock; 5. triangular piece of iron serving as a lock for the axe holster; 6. iron object with traces of wood and gilding, probably the handle of a whip / knut; 7. iron disc, probably button; 8. elongated metal plate on which two circular bronze rivets are attached, probably from shoes; 9. iron bars; 10. yellow metallic plates – two of them, tubular with non-uniform ends; 11. metal objects of rectangular shape; 12. semi-oval bone object, rectangular in section, ornamented with lines on both sides; 13. bone part at the end of the arrow; 14. shell object of irregular triangular shape with a circular hole in the center, probably amulet; 15. spherical stone, possible ball of sling; 16. stone with traces of processing on it.

VIII. Other: 1. fragmentary iron objects whose function can not be specified (14 graves); 2. thin sheets of gold (four graves); 3. pieces of textiles (two graves).

Only 13 tombs were analyzed from an anthropological point of view, nine of them belonging to men, one to women, three to children and teenagers, and one is cenotaph.

Following the analysis, a standard ritual can be revealed: inhumation, barrow, secondary graves, rectangular pit, laid out on the back, arms along the body, legs straight; orientation W-E. The inventory, considering only those pieces that are found in at least 10% of graves, would consist of: arrowheads, worked bone plates, knives, buckles, strike-a-lights, metallic decorative plates for a belt or clothing; bits, flint, stirrups, iron rings, pendants / buttons, earrings, quivers.

Starting from the aforementioned periodization adapted to our area, the tombs previously analyzed could be as follows: phase I – three graves; phases I-II – 26 graves; phases II-III – 10 graves; phase IV – 25 graves. 13 graves can be framed anywhere in phases I-IV, while two graves can belong to any of the four chronological phases but also to another historical age.

III.3. Category Ic. Graves with a different kind of inventory. The 89 graves in this category are spread in 54 sites, resulting in an average of 1.6 tombs per location. Most graves – 72 – were revealed as a result of salvage excavations; 13 (probably) during systematic research; and four are fortuitous finds. In 83 cases, for funerals, there were used the olds barrows (in 49 sites), in two cases various mounds; three graves are flat or seem to be flat, and for one we do not know the situation.

The shape of the pits was identified (and specified) in 33 cases (37.50%). The rectangular pits with more or less rounded corners are the most frequent – 18 cases (54.54%); eight pits are oval (24.24%), five are trapezoidal (15.15%) and one has an end rectangular and the other oval (3%). The position of the

deceased is lying on the back, with one exception where the skeleton is crouched laterally on the right side. The position of the arms was established for 53 graves (60%), for the other seven graves due to the disturbances suffered, only the position of one arm was noted. Six arm positions were recorded, the most common being: arms stretched alongside the body – 40 graves. The position of the legs was established for 65 graves (73%). The legs in most graves – 59 – are stretched (90.76%), except for five graves where the legs are in four other positions. Orientation was established for 80 graves (89.88%). Including slight deviations, the most common orientation is W-E in 37 of the cases (46.25%).

Inventory pieces were analyzed in terms of the frequency in graves and after the function of the objects. Six groups were established as follows:

- I. Ornaments and clothing accessories: 1. pendants / buttons (24 graves); 2. earrings (14 graves); 3. beads (eight graves); 4. buckles (five graves); 5. metallic decorative plates for a belt or clothing (four graves); 6. bracelet.
- II. Tools: 1. strike-a-lights (five graves); 2. flint (seven graves); 3. scissors (two graves); 4. whetstone; 5 awls ?; 6. chisel ?
 - III. Recipients: a. ceramic (five graves); b. metallic (one grave).
 - IV. Gaming pieces: knuckle-bone (astragalus) (two graves).
- V. Various pieces: 1. iron ring without specified function; 2. iron clamp; 3. mirror; 4. iron nails; 5. rectangular copper box; 6. wooden box; 7. horseshoe; 8. bars and iron plates; 9. iron object, octagonal flattened with two holes; 10. elongated conical iron objects, hollow in the interior; 11. iron object bent at one end as a hook, wide and pointed at the other end; 12. rectangular fragmented bone plate, with six holes; 13. pleated bone probably from a knife handle.
- VI. Other: 1. fragmentary iron objects whose function can not be specified (20 graves); 2. pieces of textiles (two graves); 3. thin sheets of gold (two graves); 4. thin sheets of cooper; 5. fragmentary wood objects whose function can not be specified.
- Only 21 tombs were analyzed from an anthropological point of view, four of them belonging to men, eight to women and nine to children and teenagers.

Following the analysis, a standard ritual can be revealed: inhumation, barrow, secondary graves, rectangular pit, laid out on the back, arms along the body, legs straight; orientation W-E. The inventory, considering only those pieces that are found in at least 10% of graves, would consist of: pendants / buttons and earrings.

Starting from the aforementioned periodization adapted to our area, the tombs previously analyzed could be as follows: phase I – seven graves; phases I-II – 24 graves; phases II-III – seven graves; phase IV –

32 graves. 13 graves can be framed anywhere in phases I-IV, while six graves can belong to any of the four chronological phases but also to another historical age.

III.4. *Category Id. Graves without inventory*. The 288 graves in this category are spread in 72 sites, resulting in an average of 4 tombs per location. Most graves – 220 – were revealed as a result of salvage excavations and 68 (probably) during systematic research. All burials were in the mounds, for this purpose being used 177 older barrows.

The shape of the pits was identified (and specified) in 95 cases (33%). The rectangular pits with more or less rounded corners are the most frequent – 43 cases (45.26%); 28 pits are oval (29.47%), 20 are trapezoidal (21%), three have an end rectangular and the other oval (3.15%) and one is rhomboidal (1.05%). The position of the deceased is lying on the back, with five exceptions, in two the skeleton is crouched laterally on the right side, and three lying on the stomach.

The position of the arms was established for 203 individuals (70.50%), for the other 25 graves due to the disturbances suffered, only the position of one arm was noted (8.68%). Eight arm positions were recorded, the most common being: arms stretched alongside the body – 151 individuals. The position of the legs was established for 231 individuals (78.49%). The legs in most graves – 206 – are stretched (89.13%), except for 22 graves where the legs are in eight other positions. Orientation was established for 281 individuals (95.56%). Including slight deviations, the most common orientation is W-E in 149 of the cases (53.21%).

Only 53 graves were analyzed from an anthropological point of view (18.43%), 23 of them belonging to men, nine to women and 21 to children and teenagers.

Following the analysis, a standard ritual can be revealed: inhumation, barrow, secondary graves, rectangular pit, laid out on the back, arms along the body, legs straight; orientation W-E.

In terms of chronology, graves without inventory can generally be attributed to phases I-IV, but some of them may belong to other epochs. Usually, but not always, these tombs are considered to have a similar dating to the different tombs with funeral inventory, if they are in the same barrow or group of mounds. However, there were also cases where there are large chronological differences between burials in the same barrow (or group of mounds). Depending on the dating of tombs with funeral inventory, the graves of this category, with large reserves, could be distributed as follows: phase I – 22 graves; phases I-II – 52 graves; phases II-III – 17 graves; phase IV – 58 graves. 139 graves can be framed anywhere in phases I-IV.

III.5. *The synthesis of burial categories*. Character of the discovery: Most graves – 418 – were revealed as a result of salvage excavations (73.19%), 125 during systematic research (22.05%), and 27 are fortuitous finds (4.76 %).

Type of burial: In 526 cases, for funerals, there were used the olds barrow (92.76%) and in some cases other mounds (2.64%); 18 graves are flat or seem to be flat (3.17%); and for eight we do not know the situation (1.41%). All the graves in barrow are secondary, with the exception of probably two cases where it seems that the barrow was raised on this occasion. Six graves are cenotaphs. 410 barrows and mounds were used, resulting in an average of about 1.3 graves per barrow / mud. Most graves in a site were found in Brăviceni – 38 tombs, and most graves in a barrow – 11 complexes were found at Ciocîlteni (in Kurgan No. 2). In 123 cases, from 67 sites, two or more graves (maximum 11) were in the same barrow. 147 graves (25.92%) suffered destructions or disturbances, modern or old, so the information suffered.

Pits and funerary structures: The pits were detected in 206 cases of 570 graves (36.33%). The most frequent are the rectangular pits with more or less rounded corners – 109 cases (52.91%), the other being oval – 59 cases (28.64%), trapezoidal – 31 cases (15%), one end rectangular and the other oval – five cases (2.42%), rhomboidal – one case (0.48%), irregular – one case (0.48%). Of the 206 pits found, 25 pits have arrangements consisting of digging mode (12.13%): 18 have one step on one of the long sides (8.73%), one has steps along both long sides 0.48%), two have one step along one of the long sides and one niche along the other long side (0.97%); and four have a lateral niche along one of the long sides (1.94%). Five deceased were deposited in a wooden coffin. In 16 cases the pits were arranged with wood around them, or they only had a cover. Wooden remains in pits (on the bottom, above or in the filler), coming from various arrangements and not from objects, have been reported in 32 other graves. 43 tombs contained vegetal remains (tree bark, leaves, grass, reed, other braids, mats) that had been deposited either at the bottom of the pit or covered the deceased. For 10 graves, stones were used to set up the pit. Six pits were prepared by depositing layers of pale yellow sand, limestone, and then in some cases the vegetal bedding. In one case, there was a strong burning of the pit.

The position: 553 individuals of the 570 graves (eight doubles) were deposited lying on the back (*in dorsal decubitus*) (95.65%). There are seven exceptions, in four the skeleton is crouched laterally (*in lateral decubitus*) – three on the right side, one on the left side –, and three lying on the stomach (*in ventral decubitus*) – which is a less common practice for the populations of that period. Twelve graves are completely destroyed, and six are cenotaphs.

The position of the arms was determined for 380 individuals (66.43%) of the 570 graves, for another 41 deceased, due to the disturbances suffered, only the position of one arm (7.20%) was recorded. There were 12 positions and variants as follows: 1. arms along the body (270 graves, 70.89%); 2. right arm along the body, left arm bent from the elbow and brought to the basin (43 graves, 11.37%); 3. right arm along the body, left arm bent from the elbow and brought to the chest (three tombs, 0.79%); 4. right arm along the body, left arm bent strongly from the elbow and brought to the collarbone (two graves: 0.52%); 5. left arm

along the body, right arm bent from the elbow and brought to the basin (30 tombs, 7.93%); 6. arms flexed slightly from the elbow and brought to the basin (24 tombs, 6.35%); 7. arms flexed slightly from the elbow and brought to the abdomen (a grave, 0.26%); 8. right arm slightly bent from the elbow and brought to the basin, left arm bent strongly from the elbow and brought to the end of the right femur (a grave, 0.26%); 9. right arm bent from the elbow and brought to the chest, left arm slightly bent from the elbow and brought to the basin (two graves: 0.52%); 10. right arm bent strongly from the elbow and brought to the collarbone, left arm bent from the elbow and brought to the chest (one grave, 0.26%); 11. arms bent from the elbow and brought to the collarbone (a grave, 0.26%).

The position of the legs was established for 426 individuals (73.56%) of the 570 graves. The following 10 positions were recorded: 1. legs stretched (387 tombs, 91%); 2. right leg bent from the knee to the right, left leg straight (three tombs, 0.78%); 3. right leg bent from the knee to the left, left leg straight (one grave, 0.26%); 4. left leg bent from the knee to the left, right leg straight (five tombs, 1.30%); 5. left leg bent from knee to right, right leg straight (three tombs, 0.78%); 6. legs slightly knee-to-right (10 or 11 graves, 2.35% - 2.61%); 7. legs slightly knee-to-left (four or five graves, 0.78% - 1.05%); 8. legs in the diamond (two tombs: 0.52%); 9. legs are crossed (three grave, 0.26%). 10. crossed legs at the tibia or soles (seven graves, 1.82%);

The orientation was established for 532 individuals of 525 graves (92.17% of 570 tombs with 577 individuals). For 45 graves we do not know the orientation (39 destroyed or undefined, six cenotaphs). The situation is as follow: W-E (207 cases, 38.86%); WSW-ENE (40 cases, 7.54%); WNW-ESE (41 cases, 7.54%). Total group W-E (288 graves, 53.96%).

E-W (14 cases, 2.64%); ENE-WSW (seven cases, 1.32%); ESE-WNW (four cases, 0.75%). Total group E-W (25 graves, 4.71%).

N-S (15 cases, 2.83%); NW-SE (87 cases, 16.41%); NNW-SSE (16 cases, 3%); NE-SW (12 cases, 2.26%); NNE-SSW (three cases, 0.56%). Total group N-S (133 graves, 25%).

S-N (nine cases, 1.70%); SW-NE (53 cases, 10%); SSW-NNE (six cases, 1.13%); SE-NW (eight cases: 1.50%); SSE-NNE (two cases, 0.37%). Total group S-N (79 graves, 14.90%).

Anthropological analysis: Of the 570 tombs with 578 individuals (- 6 cenotaphs = 572 individuals) only 108 individuals were analyzed (19%), the situation being as follows: 50 men; 21 women; 37 children and / or teenagers; six cenotaphs.

Inventory groups by function. After the function of the objects, nine groups were established as follows:

- I. Harnesses: 1. bits (69 graves); 2. stirrups (28 graves); 3. *psalia* (three graves); 4. metallic ornaments for the harness (two graves); 5. metallic seals on the saddle ends.
- II. Weapons and military equipment: 1. arrowheads (71 graves); 2. knives (64 graves); 3. worked bone plates most coming from parts of the bow (41 graves); 4. swords / sabres (16 graves); 5. quivers (15 graves); 6. daggers (13 graves); 7. lance / spear heads (seven graves); 8. armor pieces (coat of mail six graves, breastplate one grave = seven complexes); 9. axes (four graves); 10. helmets (three graves); 11. bow holster.
- III. Ornaments and clothing accessories: 1. buckles (47 graves); 2. pendants / buttons (41 graves); 3. earrings (35 graves); 4. metallic decorative plates for a belt or clothing (20 graves); 5. beads (15 graves); 6. digital rings (four graves); 7. bracelets (three graves).
- IV. Tools: 1. strike-a-lights (31 graves); 2. flint (28 graves); 3. whetstones (five graves); 4. scissors (four graves); 5. spindle whorl (three graves); 6. piercing bone; 7. awls; 8. drill-press.
 - V. Recipients: a. ceramic (13 graves); b. metallic (four graves); c. wood (two graves).
 - VI. Gaming piece: knuckle-bone (astragalus) (nine graves).
 - VII. Coins: (one grave).
- VIII. Various pieces: 1. iron rings without specified function (19 graves); 2. clamps (six graves); 3. nails (four graves); 4. small handles (iron, bronze, bone) (three graves); 5. horseshoes (two graves); 6. padlock (two graves); 7. mirror; 8. bell; 9. rectangular copper box; 10. round and elongated iron object (mace?); 11. bars and iron plates; 12. bronze bar; 13. elongated iron object with a copper plate attached; 14. the object of iron bent at one end (strike-a-lights fragmentary?); 15. iron object, octagonal flattened with two holes; 16. four elongated conical iron objects, hollow in the interior; 17. iron object bent at one end as a hook, wide and pointed at the other end.
- IX. Other: 1. fragmentary iron objects whose function can not be specified (55 graves); 2. bones of other animals (14 graves); 3. pieces of textiles (11 graves); 4. bone parts (10 graves); 5. stone objects (nine graves); thin sheets of gold, coming from the gilding of objects (eight graves); 7. pieces of leather (three graves); 8. wooden objects (two graves).

The funeral standard. Following the analysis, a standard ritual can be revealed: inhumation, barrow (93%), secondary graves, rectangular pit (53%), laid out on the back (96%), arms along the body (71%), legs straight (91%); orientation W-E (54%); the offering consisting of the horse or certain parts of horse (20%). The inventory, considering only those pieces that are found in at least 10% of graves, would consist of: arrowheads, bits, knives, buckles, worked bone plates, pendants, earrings, strike-a-lights, stirrups, flint.

Chronology. Regarding the chronology, with all the necessary reserves already expressed, the situation for graves with inventory (Ia-c) is as follows: From the first phase (the end of the 9th century - the

11th century) there are 21 tombs, which may belong ethnically to the first Turanics arrived in the region – Petcheneks, but also to other Turks – Uzes, Berendes. From phases I and II (the 11th - 12th centuries) without being able to separate more finely, dates the most numerous group consisting of 108 tombs, which may belong mainly to Petcheneks and Uzes, and to some extent to the new masters of the North-Pontic steppe – the Cumans. From phases II-III (12th century - mid-13th century) there are only 42 tombs, which can belong to the Cumans before the Mongol invasion. In the fourth phase (the second half of the 13th century - the beginning of the 14th century) a group of 70 graves belonging to various populations – the Cumans, the "black skull-cups / khlobuks", the Alans etc. – under the domination of the Golden Horde. The last group consists of 32 tombs, for which the chronological elements allow a general dating in phases I-IV. There are also nine new graves, with no sufficient chronological evidences, which may belong to any of the four periods, but also to other historical eras.

Adding tombs without inventory results in the following situation: phase I-43 graves; phases I-II-160 graves; phases I-III-59 graves; phase IV-128 graves; phases I-IV-171 graves.

Chapter IV. Observations and comments concerning the analyzed categories. There were made a series of assessments about the Turanic populations mortuary practices; the first main elements are represented by inhumation always in an existing barrow / mound (secondary graves) as the exclusive funerary ritual. The second issue discussed relates to the habits and preferences for the deposition of certain objects. The military panoply depicted in graves consists of arrowheads, knives (if the function of weapon is accepted rather than utensil), bows, swords, daggers, and to a lesser extent of spears (seven graves) and axes (four tombs). This is complemented, admittedly less often, by military accessories: quivers of arrows and a few items of armor (especially the mail-coat) and helmets (three graves). The harness pieces consist of bits, stirrups, and psalia. As for the ornaments, Turanic populations preferences are directed towards earrings, pendants and beads, and less to digital rings and bracelets. Among the tools found in the tombs, only the strike-a-lights, often accompanied by the flint, can be considered an important presence, while the whetstones, scissors and spindle whorls are found in much smaller proportion. Another category of objects that is relatively common and slightly surprising is the recipients, mainly pottery (13 tombs), but in some cases there are also metal cauldron (four tombs) and wood buckets (two tombs). We should also remember the knuckle-bone (represented by astragalus) discovered in nine tombs, which although not numerically impressive, indicate a habit and an inclination for this game to the respective populations. Mainly due to funeral inventory categories Ia and Ib are considered to belong to warriors, their percentage reaching about one third of the population.

In Chapter V. – *About artifacts*, a series of typological and chronologically representative pieces are analyzed, starting from the nine groups of object categories that make up the funeral furnishings previously

established. All finds are studied, establishing types and analogies for the dating, as exactly as possible, of each chosen object. The bits and stirrups were selected from the harness pieces. The bits used by the Turanics fall into two major types: I. single-barred; II. composite. The stirrups are made of iron and we distinguish four types of shapes: I. ovoid; II. circular; III. trapezoidal; IV. in the form of the letter "D".

From the category of weapons and military equipment were brought into discussion: the arrowheads, worked bone plates coming from parts of the bow, the spear heads, the swords, the axes and the helmets. Two groups were established for the arrowheads – iron and bone. The iron arrowheads were classified into two major types: I. with spike for fixing, II. with tube for fixing. Within type I were distinguished by form eight variants: 1. rhomboid; 2. leaf-shaped; 3. with three wings; 4. in the form of "Y"; 5. in the form of a chisel; 6. spindle-shape; 7. triangular; 8. with frontal axis and two wings. Type II. consists in arrowheads with two wings – so-called "swallow-tail". The second group includes a few bone conical arrowheads. The axes were attributed to three types: I. with sharpened wings around the hafting hole; II. with thickened and lengthened edges, narrow body and triangular blade; III. with straight blade widening towards the cutting edge in the form of a triangle.

Among the ornaments and clothing accessories were selected: buckles, beads, pendants, earrings and bracelets. Buckles are classified into three types: I. with simple ring, having five variants – 1. round, 2. oval, 3. rectangular, 4. rectangular with rounded corners and the long sides bent inwards, 5. in the form of the letter "D", 6. horseshoe shaped; II. with double ring, having three variants – 1. *lyra*-shaped with two subvariants; 2. in the form of the figure "8"; 3. an almost rectangular bone buckle with rounded corners; III. with a plate for fixing to the belt. The pendants were divided into eight types: I. globular or oval, with two variants – a. not ornamented, b. ornamented; II. in the form of a pear; III. bell; IV. leaf/heard-shaped; V. shovel; VI. composed of two ornamented plates with geometric motifs; VII. *Kauri* shell; VIII. cruciform. Five types of earrings are separated: I. ring-shaped, with four variants – a. round in section; b. square in section; c. twisted; d. made by winding a thin wire in the form of a spring; II. with a spherical body placed on the ring; III. in the form of a question mark. The bracelets are of one type – from twisted wire, with the ends as wire loops.

Of tools / utensils were analyzed only the strike-a-lights and the scissors. The strike-a-lights are parted into four types: I. Bracket-shaped, with two variants – a. flattened elipsoid with the ends touching, b. with rolled ends, not connected; II. oval shape; III. in the form of the letter "B"; IV. rectangular. Also, a bronze/copper cauldron, padlocks and a mirror have been discussed.

Chapter V. Overview of the territories from the east of the Dniester. The Dniester River did not constitute a barrier to nomadic populations in any historical period, starting from the Bronze Age and ending with the Tartars. I considered useful a brief look of what is happening from archaeological point of

view in the 10th - 13th centuries in the immediate vicinity, on the left bank of the Dniester going east to the Kuchurhan River. The area between the Dniester basin, the Carpathians and the Lower Danube would be the western end of the western segment of the European steppe bounded to the east by Don River. In this region there were 114 graves spread across 23 sites. While maintaining the same criteria so far, 98 graves could be assigned as follows: 20 tombs in category Ia (with deposition of horses or certain parts of horses); 22 graves in category Ib (with weapons and / or armor and harness pieces); 22 tombs in category Ic (with a different kind of inventory); 34 tombs in the Id category (without inventory). For 16 discoveries, the situation is not very clear. The analysis revealed a situation very similar to that of the west of the Dniester. On the whole, we can say that the funeral practices are identical in the areas mentioned to the west and east of the Dniester. The small peculiarities that are hardly visible to the east of the Dniester have their origin in the faulty character of the old excavations (much more numerous than in the western area) and consequently the publication of the results. On the other hand, it is also due to the fact that many of the discovered complexes happened to belong to the second half of the 13th century (maybe the beginning of the 14th century), when under the influence of the Golden Horde we find the use of new ritual elements, especially in funerary structures and orientation. In the inventory we notice the appearance of new pieces (mirrors), the diversification of some types of ornaments (earrings in the form of a question mark), or the increasing of others, such as beads to the detriment, for example, of bells and heart shaped pendants.

Chapter VI. *Instead of conclusions*. First of all, it is pointed that although it may seem numerous the 573 or about 700 funerary finds (if we include the entire Dniester basin), in reality they are few for a period of 400 years, resulting in about 150-175 burials per century in a large area of approximately 100000 square kilometers. Therefore any conclusions and comments should be made with the reservation imposed by this stage of research. Then there are a series of ideas concerning funerary practices, the use of the old barrows, and especially the grouping and spreading of tombs in certain microzones according to the chronological stages. The distribution of graves is limited mostly to the eastern part of this large area (most being situated between Prut and Dniester Rivers), no certain tomb is located west of the Olt River. Also, a brief comparison is made with the burials in the Carpathian basin during the 10th - beginning of the 11th century ("the era of the Hungarian conquest"). There have been a number of similarities, but also fundamental differences, first of all the fact that the tombs here are flat while in the area between the Carpathians, the Danube and the Dniester there are secondary graves in barrows. Finally, it is appreciated that, beyond the ordering of the 570 tombs (this is the real basis of documentations) in a certain manner that can be discussed and resumed at any time with other criteria and technological means, the work did not aim to provide any final solutions, but tried to show the real documentary situation of this funeral phenomenon at the moment.