Early Neolithic in North Macedonia and Bulgaria: geographical and cultural relations

Ljubo Fidanoski

Museum of the city of Skopje, North Macedonia

fidanoskilj@yahoo.com

Zgodnji neolitik v Severni Makedoniji in Bolgariji: geografski in kulturni odnosi

Prispevek se osredotoča na različne vidike materialne kulture skupnostih, ki so naseljevale dve izmed najpomembnejših regij Balkana v zgodnjem neolitiku, Severno Makedonijo in Bolgarijo. Prispevek išče vzroke podobnosti pri nekaterih vrsteh artefaktov v skupnostih, ki sicer proizvajajo in uporabljajo relativno različno materialno kulturo.

Ključne besede: zgodnji neolitik Balkana, zgodnjeneolitska najdišča in kulture, problem 'kulture', mikro-regionalne specifike, kulturni stiki.

The paper focuses on different aspects of material culture in communities that inhabited two of the most important regions in the Early Neolithic Balkans, North Macedonia and Bulgaria. Paper seeks to discover the causes for similarities of certain artefact types in communities that produce and use relatively different material culture.

Keywords: Balkans EN, EN sites and cultures, the problems of 'culture', microregional specifics, cultural contacts.

The exquisite beauty of the Balkans lies in the diversity of nature: the forests, meadows and pastures, the diversity of relief forms represented by mountains, ravines, hills, highlands, valleys and plains, the interwoven hydrographic network composed of natural lakes, many rivers and tributaries, groundwater and springs, and ultimately the presence of diverse peoples and communities, each with its own past, traditions and authenticity. The rich Balkans cultural heritage, archaeology, history and art history interpret it in different ways, with different methodological approaches and under the influence of different schools, often intertwining each other. After the dominance of scientific approaches in the archaeological research in the second half of the 20th and especially in the 21st century, especially with the application

of new methodologies and the significant presence of interdisciplinarity, many practiced approaches, methodologies and schools have been changed, but the results of their interpretations have not been substantially altered, which in fact proves the reliability of most hypotheses, most of them, set long time ago.

In the paper below, I will make an attempt to corroborate some of the already set topics in Southeastern prehistoric archaeology in the context of the EN cultures of North Macedonia and Bulgaria (especially its western part), but also to propose some new considerations. For this purpose, I will direct my attention to several sites from Amzabegovo-Vršnik culture and Velušina-Porodin culture in North Macedonia and to some sites (known by cultures of different names according to different authors) in

western Bulgaria. I underline that in the framework of this analysis I will try to get out of the practiced approaches so far, first in relation to the cultural-historical context. Taking into account the different state of research at the sites in North Macedonia and Bulgaria, in a narrower and broader context, the different methodological approaches, as well as the different level and quality of the published material this study should be accepted conditionally and hypothetically. Also, in advance, I refer to the limitations regarding the relatively small number of selected reference sites (cultures), in order to direct specific cultural associations on this territory in the Central Balkans region, not taking into account the large number of EN sites, cultures and complexes from Greece, Albania, Kosovo, Serbia, Romania, etc.

Special emphasis will be put on the EN painted pottery as a dominant feature that (in the literature) most often defines and separates the sites and cultures among themselves. With this analysis, I will unquestionably touch upon those characteristics and properties that set this significant prehistoric cultural heritage under a common denominator. Therefore, the unbreakable common culture and history of all today's entities in the Balkans will again be confirmed, hoping that with such studies it will be possible to find new insights into the Neolithic welfare of this very important part of Europe.

The research so far

The Neolithic is the most interesting and probably most enigmatic prehistoric period in the entire Balkans and it is especially diverse in North Macedonia and Bulgaria. With scholars from Europe and beyond, even today, this issue on this territory daily provokes new challenges and ideas for new research activities. The specific Neolithic artefacts on the surface of the Macedonian soil – in the past still unknown and unexplored – have attracted the attention of many archaeologists, historians and various enthusiasts (Naumov 2009a, 3). The earliest historically documented interests of Macedonian Neolithic

are associated with the research of a series of foreign and domestic archeologists in the 20th century (Naumov 2009a, 3–5; Fidanoski 2017a, 31).

In the 1930s, the pioneering studies of Fewkes, concentrated in Pelagonia should be highlighted. From the same period Heurtley (1939) is also an important explorer of Macedonian prehistory, one of the first authors who pointed out several prehistoric sites, and his extensive work was completed within the monograph *Prehistoric Macedonia*. The second half of the 20th century is a turning point in the research of Macedonian Neolithic. Reaching Neolithic issues not only in North Macedonia but also in the wider space of the Balkans, an inevitable name in the literature is Milojević, as one of the pioneers of the Balkan Neolithic periodization. Since the end of the 1950s, a number of archaeologists have emerged that are intensively beginning to deal with this interesting prehistoric period, in particular, the research of Grbić, Galović, P. and J. Korošec, and especially the work of M. and D. Garašanin. In this period, perhaps the most significant archeological investigations on the Neolithic sites in North Macedonia were performed, and from their results, several papers and two monographs were published. Here, in particular, the works of Grbić and his associates (Grbić et al. 1960), *Porodin*, and *Barutnica* by P. and J. Korošec (Korošec and Korošec 1973). In the period after the 1960s, M. and D. Garašanin have a great contribution to Macedonian prehistoric archaeology which explored most of the prehistoric sites in North Macedonia (at that time known), regularly publishing the obtained results.

As one of the rare foreign scientists, a special place in the archaeology of the Macedonian Neolithic has Gimbutas (USA), which explored the site Barutnica-Amzabegovo in the late 1960s and early 1970s, and for the first time (together with collaborators), published a comprehensive monography of the site – *Anza* (Gimbutas 1976a). It contains a series of interdisciplinary analyzes, first made on a Macedonian archaeological site. The analyses refer to the geological site characteristics, the mov-

able and immovable heritage, animals and plants remains, the anthropological remains and the reconstruction of site's paleo-environment. The period of the seventies marks the appearance of the journal *Macedoniae acta archaeologica*, which regularly publishes the latest data on Macedonian archaeology in general.

In this period and then, the work of a dozen domestic archaeologists is notable throughout the whole territory of North Macedonia: Sanev, Saržoski, Simoska, Kitanoski, Todorović, Kuzman, Bilbija, Zdravkovski, Jovčevska, Mitkoski and others. In the early 1980s, one of the most important monographs on Balkan Prehistory – Prehistory of the Yugoslav Countries (*Praistorija Jugoslovenskih zemalja*), edited by Benac, was published, thus validating the benefits from the previous studies of the Neolithic in North Macedonia and other countries of former Yugoslavia. In this edition for the first time are formulated the two most important Neolithic cultures in Macedonia: Amzabegovo-Vršnik and Velušina-Porodin. The results of recent investigations, as well as the revision of some of the views, were-actualized several years ago in an edited book in honor of M. Garašanin – *Hommage to Milutin Garašanin*, edited by Tasić and Grozdanov (2006), and in two monographs: *Neolithic communities in the Republic of Macedonia* by Naumov, Fidanoski, Tolevski and Ivkowska (2009) and *Patterns and Corporeality: Neolithic Visual Culture from the Republic of Macedonia* by Naumov (2009b). In the last ten years other edited books and monographs were published, enlightening the newest insights on Macedonian Neolithic, such as: *Anzabegovo: naselba od ranijot i srednijot neolit vo Makedonija* (*Anzabegovo: Settlement from the Early and Middle Neolithic in Macedonia*) edited by Sanev (2009a); *Neolitski antropomorfni predmeti vo Republika Makedonija* (*Neolithic Anthropomorphic Objects in Republic of Macedonia*) by Naumov and Čausidis (2011); *Grnčarica: naselba od ranijot neolit* (*Grnčarica: Settlement from the Early Neolithic*) by Jovčevska (2013); *Neolitski figurini vo Makedonija* (*Neolithic Figurines in Macedonia*)

by Naumov (2015); *Grnčarica: a Contribution to the Early Neolithic Puzzle of the Balkans* by Stojanovski (2017); *Dragiša Zdravkovski In Memoriam: Cultural Manifestations during the Neolithic Period on the Territory of the Republic of Macedonia and neighboring Regions*) edited by Stojanova Kanžurova (2018); *Geneza i razvoj na Anzabegovo-Vršničkata kultura grupa* (*Genesis and Development of the Anzabegovo-Vršnik Cultural Group*) by Zdravkovski (2018) and the edited series by Fidanoski and Naumov (2016; 2017; 2018) *Neolithic in Macedonia*.

Prehistoric sites and cultures on the territory of Bulgaria are probably one of the best studied in the Balkans. At the very beginning of the 20th century, the work of Čilingirov and Popov, the first Bulgarian prehistorians, should be noted, leaving behind important data on prehistoric sites in Bulgaria.

In the period prior to the Second World War, the name of Mikov should be noted, which first started the research of the eponymous prehistoric site of Karanovo, and in the postwar period, together with one of the pioneers of the Bulgarian archaeological school, Georgiev, lay the foundations of the Karanovo culture and periodization, thus strengthening the foundations of Bulgarian prehistoric archaeology. The latter, especially in the second half of the 20th century, is intensively investigating prehistoric sites and regularly publishes the results. The work of Gaul, who first noticed the homogeneity of the Neolithic of western Bulgaria, formulates the culture of West Bulgarian painted pottery (Todorova and Vaysov 1993, 97).

After postulating the periodization and cultural specifics of the Bulgarian Neolithic, the work on this prehistoric period was further intensified in the period after the 1960s. In this period, the research of: Detev, Petkov, Todorova, Radunčeva, B. Nikolov, V. Nikolov, M. Čohadžiev, S. Čohadžiev, M. Kanchev, K. Kanchev, Stanev, Perničeva, Bakamska, Grębska-Kulow, Kulov, Gatcov, Vaysov, Bojadžiev, Leštakov and others should be pointed out. During this period, international cooperation was inten-

sified, whereby the quality of studies has been enhanced, taking into account the interdisciplinarity, which is a direct result of the joint international research, headed by: Merpert, Hiller, Lichardus, Pavúk and others.

During the last forty years, the results of a large number of archaeological investigations were published in several important monographs mainly on concrete sites and reviews on Bulgarian Neolithic: *Kapitan Dimitriev* (Nikolov 1999a), *Balgarčevo* (Pernicheva-Perets, Grębska-Kulow and Kulov 2011), *Ohoden* (Ganecovski 2009), *Yabalkovo* (Roodenberg, Leshtakov and Petrova 2014), *Ново-каменната епоха в България (New Stone Age in Bulgaria)* (Todorova and Vaysov 1993), and other volumes. This period is marked by many works in Bulgarian and foreign scientific publications and especially active participation in scientific meetings, symposia, conferences, etc. Apart from the regular publication of the journals *Arheologiya* (*Archaeology*), *Arheološki otkritija i razkopki* (*Archaeological discoveries and excavations*), *Razkopki i proučvanija* (*Excavations and studies*), reaffirmation of one of the most important scientific journals of the last century, *Studies of Prehistory* (*Studia praehistorica*) is of key importance. Also the publication of several edited books from several scientific meetings – namely in honor of the older generation prehistorians and scientific conferences, such as: *Karanovo* (Hiller and Nikolov 1997; Hiller and Nikolov 2000; Hiller and Nikolov 2002; Hiller and Nikolov 2005), *Praistoričeska Trakiya (Prehistoric Thrace)* (Nikolov, Băčvarov and Kalčev 2004), *In the Steps of James Harvey Gaul* Vols. 1 and 2 (Stefanovich, Todorova and Hauptmann 1998; Todorova, Stefanovich and Ivanov 2007), *Von Domicia bis Drama, Gedenkschrift für Jan Lichardus* (Nikolov and Băčvarov 2004), *Prae in Honorem Henrieta Todorova* (Stefanovich and Angelova 2007), *Southeast Europe and Anatolia in prehistory: Essays in honor of Vassil Nikolov on his 65th anniversary* (Bacvarov and Gleser 2016) and others.

In short, it can be concluded that in the past period in North Macedonia and Bulgaria

the Neolithic is relatively well studied and appropriately presented. However, one should bear in mind that Bulgarian literature abounds with more bibliographic units, unlike the Macedonian one. I think that this is due to two decisive conditions, longer traditions of research (and therefore continuous publication in several scientific journals, edited books and monographs) and the scope of the research itself (many Neolithic sites are explored in full or on a large scale).

The material

The large number of Neolithic sites (and cultures) in the Balkans, in order to get more objective evaluation of their characteristics and properties they carry with them, require equal scientific treatment. The deliberate “exclusion” of a large number of related sites from Greece, Albania, Serbia and Romania has been made in order to preserve the core of the topic i.e., preventing the spread of the focus towards the larger Central Balkans’ area. In other words, further in my work, I will pay full attention only to specific Macedonian sites (Pelagonia, Skopje and Ovče Pole Plains) and Western Bulgaria (Sofia and Pernik Plains as well as Struma Valley), minimally touching other sites important for the topic from the rest of Bulgaria and the wider Balkan regions.

Bearing in mind the state of Macedonian and Bulgarian knowledge of the Neolithic in this area (explained in the chapter above), in the paper below I will make a selection of a total of 11 sites from North Macedonia and Bulgaria. In North Macedonia, I will focus on five sites: Barutnica-Amzabegovo, Cerje-Govrlevo, Veluška Tumba-Porodin, Čuka-Topolčani and Vrbjanska Čuka-Slavej, and in Bulgaria on six: Slatina-Sofia, Krajnici, Galabnik, Vaksevo, Rakitovo and Kovačevo. In addition, I emphasize that I will analyze exclusively the sites, not cultures, cultural zones, blocks and complexes, for one reason – the large number of cultures and other social categories by themselves bear more ambiguity rather than explanations (see the chapter below).

The focus of this work will be directed to only one important segment of pottery, animal husbandry and architecture. As I have stated above, due to possible (unwanted) spreads in different directions, the scope will be limited to stated social, economical and cultural categories as the basic characteristics of the Balkans Neolithic communities. However, I am fully aware of all possible comments because of not discussing the largely discovered so-called coarse pottery, the various symbolic ceramic objects, funeral practices and the economy. Part of these aspects will get their place, but only as an additional illustration of the thesis. It should be noted again, that this limited selection of sites and elements of material culture has been made in order to avoid generalized views. If all the geographical and cultural-historical aspects should be taken into account, we can reaffirm the familiar views on the homogeneity of the Balkan Neolithic – in that way entering into a full generalization of the various EN communities inhabiting large territories in Southeastern Europe.

Neolithic in North Macedonia and Bulgaria: territory, timeline, cultures, cultural zones, blocks and complexes

The Neolithic in Macedonia and Bulgaria appears as an already formed culture introduced by the EN settlers from Anatolia, most probably through Greece mainland, according to the majority of authors (Gimbutas 1976b, 76; Garašanin 1989, 27; Nikolov 1990, 11; Todorova and Vaysov 1993, 58–63; Sanev 1995, 23; Thissen 2000, 149–51; Pavúk 2007, 165; Naumov 2009c, 19). In general, this model has long been set and accepted in contemporary prehistoric archaeology, with few additions and corrections. In short, these hypotheses are made on the basis of analyzes of immovable and movable archaeological cultural heritage: architecture, funeral practices and ceramics; and economy: agriculture, hunting, craftsmanship, and exchange. As a direct result of these elements, certain insights have been

obtained about the social aspects of mankind – whether it is today, 1,000 or 10,000 years ago.

Territory

Within the Balkans prehistoric archaeology several views on the pathways under which the first Neolithic settlers moved, where they originally settled and how they continued the processes of neolithization of Europe, are relevant. The most important region for the emergence of the EN in the Balkans is Thessaly, because from here probably through different pathways, the rest of the peninsula was inhabited. It is quite certain that the Neolithic man was orientated on the natural-geographical characteristics of the relief, and as a result, he probably moved along the river flows. The two main routes where the first Neolithic communities in the Central Balkans region probably migrated, were the valleys of Vardar and Struma rivers. This topic is of great importance in the literature (Gimbutas 1976a; Sanev 1978; Garašanin 1979; Garašanin 1989; Čohadžhiev 1990; Nikolov 1990; Todorova and Vaysov 1993; Sanev 1995; Nikolov 1996a; Nikolov 1996b; Nikolov 1999b; Nikolov 1999c; Lichardus-Itten et al. 2002; Nikolov 2002a; Nikolov 2003; Sanev 2004; Zdravkovski 2006; Bogdanović 2007; Čohadžhiev 2007; Pavúk 2007; Naumov 2009c; Zdravkovski 2009); and the hypotheses are most often argued on the basis of natural pathways in the above mentioned river flows. Bearing in mind the great Neolithic heritage on the wider territory of North Macedonia and Bulgaria, there are basically not more than two or three views on the pathways used by the EN population. According to Nikolov (1990, 11, 15), those roads are the river flows of Mesta, Struma and Vardar, the most important of which is along the Struma river, and according to him the Vardar Valley, has a secondary role. Todorova and Vaysov (1993, 94), agree that these river flows had crucial role in the neolithization processes, but they see the Vardar valley pathway as the main one. The course of Vardar is crucial for the *formation of Neolithic settlements in the Republic of Macedonia* according to Nau-

Figure 1. EN sites in North Macedonia and western Bulgaria (group 1: 1. Barutnica-Amzabegovo, 2. Cerje-Govrlevo, 11. Kovačevo; group 2: 3. Veluška Tumba-Porodin, 4. Čuka-Topolčani, 5. Vrbjanska Čuka-Slavej; group 3: Slatina-Sofia, 7. Krajnici, 8. Gălăbnik, 9. Vaksevo, 10. Rakitovo).

Figure 2. EN cultures in North Macedonia (Fidanoski 2009a).

mov's opinion (2009c, 26). Recently, a relatively new idea about the first Neolithic pathways in North Macedonia was suggested by Zdravkovski (2006, 99; 2009, 20) – that Pelagonia was initially inhabited, after which the Neolithic communities migrate towards the Polog, the Skopje and Ovče Pole Plains, from where through Bregalnica valley they head eastwards to Struma valley.

Considering the already set theses for natural communications as the basis for the EN pathways of movements and contacts, thus supported by the rich material culture, I consider that a model of territorial “borderlines” should be established (Fig 1–3).

Namely, by reduction of the geographical space one internal model of geographical communication can be obtained, including only

North Macedonia and western Bulgaria. In the central part of this geographical analysis there are three sites containing EN and MN phases/layers: Cerje-Govrlevo, Barutnica-Amzabegovo and Kovačevo – *group 1*. The EN sites of Pelagonia: Čuka-Topolčani, Vrbanska Čuka-Slavej and Veluška Tumba-Porodin, belong to the so called *group 2*. The EN and MN sites: Slatina-Sofia (Sofia Plain), Gălăbnik (Radomir Plain), Vaksevo, Krajnici, Kovačevo (Struma Valley), and Rakitovo (Rhodope massif), belong to *group 3*. From a geographical point of view, *group 1* has direct natural communications with the other two groups, and maybe has the best position (set in this artificially reduced region). Accordingly, *group 1* through the valley of Vardar and Babuna Mountain, Veles region, or through

Figure 3 EN cultures in Bulgaria (1. Western Bulgarian Painted Pottery culture, 2. Slatina-Sofia culture in earliest phase and in later phases treated as Kremikovci culture, 3. Gălbănik culture in earliest phase, 4, 5. Protostarčevo and Starčevo culture, 6. Krajinci culture in earliest phase and in later phases treated as Gălbănik culture, 7. Karanovo I culture, 8. Kovačevo).

Gradsko, Selecka Planina (Mountain), Prilep region, communicates with *group 2*. *Group 1* can communicate directly with *group 3* of the Vardar Valley, north to the Pčinja riverflow, or south along Bregalnica riverflow. The communication of *group 2* and *group 3* geographically does not allow a direct approach, that is, it may have taken place southwards through Thessaly, then along the Struma riverflow to north, or north again through Vardar riverflow, and then further to north to Pčinja riverflow or south along the Bregalnica riverflow. From what has been said so far, it can be confirmed that Vardar and Struma and their tributaries are essential for Neolithic migrations. However, on the basis of the material culture the dynamics of communications vary in a different phase/s (see the chapter Neolithic heritage), that is, in the EN *group 2* and *group*

3 although geographically distant show greater similarities, and in the MN this is the case with *group 1* and *3*.

Time

Unlike the dominant approach in older studies – that material culture is the basic chronological and periodization indicator, today absolute dates are the primary means of (precisely) defining Neolithic contexts. Absolute dates, which are continuously made in large numbers for sites around the world for decades, are rare for North Macedonian Neolithic sites. Unfortunately, until today only for a total of 11 (Neolithic) sites are available absolute dates. There is a large number of dates for Barutnica-Amzabegovo, and a smaller number of dates for Cerje-Govrlevo, Vršnik-Tarin-ci, Grnčarica-Krupište, Čuka-Topolčani, Tum-

ba-Porodin, Vrbjanska Čuka-Slavej, Veluška Tumba-Porodin, Tumba-Mogila, Markovi Kuli and Golema Tumba-Trn (Gimbutas 1976b; Srdoč et al. 1977; Thissen 2000; Thissen 2005; Reingruber and Thissen 2005; Whittle et al. 2005; Fidanoski 2009a; Naumov 2009c; Fidanoski 2012; Naumov 2016; Naumov et al. 2016; Stojanovski 2017; Veljanovska 2017; Fidanoski 2018; Naumov et al. 2018; www.14sea.org). According to the scope of research for the purposes of this analysis, the dates of the following Macedonian EN and MN sites will be given.

Calibrated dates BC (2σ) for Barutnica-Amzabegovo (Whittle et al. 2005).

7,560±70 BP, 6,510–6,230 (95,4%) (2σ) cal BC,
7,230±170 BP, 6,450–5,750 (95,4%) (2σ) cal BC,
7,210±50 BP, 6,210–5,980 (93,3%) (2σ) cal BC,
7,180±60 BP, 6,220–5,970 (85,2%) (2σ) cal BC,
7,150±70 BP, 6,120–5,840 (86,7%) (2σ) cal BC,
7,120±100 BP, 6,220–5,770 (95,4%) (2σ) cal BC,
7,110±120 BP, 6,220–5,730 (95,4%) (2σ) cal BC,
7,110±120 BP, 6,220–5,730 (95,4%) (2σ) cal BC,
7,080±60 BP, 6,070–5,800 (95,4%) (2σ) cal BC,
7,050±150 BP, 6,250–5,600 (95,4%) (2σ) cal BC,
7,050±80 BP, 6,030–5,730 (93,5%) (2σ) cal BC,
7,000±270 BP, 6,500–5,300 (95,4%) (2σ) cal BC,
7,000±280 BP, 6,500–5,300 (95,4%) (2σ) cal BC,
6,830±70 BP, 5,850 (95,4%) (2σ) cal BC,
6,940±80 BP, 5,930–5,660 (85,9%) (2σ) cal BC,
6,840±120 BP, 5,930–5,520 (91,5%) (2σ) cal BC,
6,850±50 BP, 5,810–5,630 (95,4%) (2σ) cal BC,
6,800±140 BP, 6,000–5,450 (95,4%) (2σ) cal BC,
6,700±150 BP, 5,900–5,300 (95,4%) (2σ) cal BC,
6,630±150 BP, 5,850–5,300 (95,4%) (2σ) cal BC,
6,510±110 BP, 5,670–5,260 (95,4%) (2σ) cal BC,
6,440±120 BP, 5,650–5,050 (95,4%) (2σ) cal BC,

Calibrated dates BC (2σ) for Cerje-Govrlevo (Fidanoski 2012, Fig. 38a, b).

6,960±50 BP 5,923–5,735 (86,9%) (2σ) cal BC,
6,955±34 BP 5,893–5,728 (94,4%) (2σ) cal BC,
6,894±34 BP 5,814–5,714 (85,9%) (2σ) cal BC,
6,516±139 BP 5,714–5,228 (94,4%) (2σ) cal BC,

Calibrated dates BC (2σ) for sites of Velušina-Porodin culture (Whittle et al. 2005).

Čuka-Topolčani
7,680±160 BP, 6,862–6,236 (87,7%) (2σ) cal BC,
7,010±190 BP, 6,253–5,558 (95,1%) (2σ) cal BC,
Vrbjanska Čuka-Slavej
6,996±24 BP, 5,981–5,807 (95,4%) (2σ) cal BC,
6,946±44 BP, 5,972–5,732 (95,4%) (2σ) cal BC,
Veluška Tumba-Porodin
6,950±120 BP, 6,034–5,635 (95,4%) (2σ) cal BC,
6,900±90 BP, 5,928–5,641 (89,2%) (2σ) cal BC,
6,890±140 BP, 6,032–5,553 (95,4%) (2σ) cal BC,

For Barutnica-Amzabegovo dates, according to stratigraphical data and comparative analyzes on the material, Gimbutas (1976b, 29) positioned the EN between 6,100–5,800 cal BC and the MN between 5,800–5,500 cal BC. According to comparative and contextual data for the transitional phase between EN and MN the values for Cerje-Govrlevo fall in the interval between 5,900–5,700 cal BC. Regarding the data for Čuka-Topolčani, Vrbjanska Čuka-Slavej and Veluška Tumba-Porodin, according to some authors, later dates are expected i.e., between 6,000 and 5,500 cal BC (Thissen 2000, 207; Naumov 2009c, 26; Fidanoski 2009a, 34).

The dataset of Bulgarian Neolithic is much larger and obtained from several EN, MN and LN sites, but still new dates are welcome (Nikolov 1992, 11–2; Todorova and Vaysov 1993, 86–91; Reingruber and Thissen 2005; Görsdorf and Bojadžiev 1996; www.14sea.org). For the purposes of this work the EN and MN dates of

the mentioned sites with available dates shall be provided below.

Calibrated dates BC (1σ) for Slatina-Sofia, Gălabnik and Kovačevo (Reingruber and Thissen 2005).

Slatina-Sofia
6,970±60 BP, 5,970–5,780 (1σ) cal BC,
6,960±60 BP, 5,900–5,760 (1σ) cal BC,
6,940±60 BP, 5,880–5,750 (1σ) cal BC,
6,890±60 BP, 5,840–5,720 (1σ) cal BC,
6,860±50 BP, 5,800–5,675 (1σ) cal BC,
6,840±60 BP, 5,780–5,660 (1σ) cal BC,
6,830±60 BP, 5,760–5,650 (1σ) cal BC,
6,810±50 BP, 5,730–5,660 (1σ) cal BC,
6,780±60 BP, 5,720–5,640 (1σ) cal BC.
Gălabnik
7,220±80 BP, 6,210–6,010 (1σ) cal BC,
7,120±70 BP, 6,070–5,910 (1σ) cal BC,
7,114±53 BP, 6,050–5,920 (1σ) cal BC,
7,140±80 BP, 6,090–5,910 (1σ) cal BC,
7,100±80 BP, 6,060–5,890 (1σ) cal BC,
7,030±70 BP, 5,990–5,840 (1σ) cal BC,
7,070±180 BP, 6,090–5,740 (1σ) cal BC,
7,070±60 BP, 6,010–5,890 (1σ) cal BC,
7,020±60 BP, 5,990–5,840 (1σ) cal BC,
7,020±150 BP, 6,020–5,740 (1σ) cal BC,
6,970±50 BP, 5,970–5,780 (1σ) cal BC,
6,950±70 BP, 5,900–5,740 (1σ) cal BC,
6,790±80 BP, 5,750–5,620 (1σ) cal BC,
6,760±80 BP, 5,740–5,570 (1σ) cal BC,
6,760±60 BP, 5,720–5,630 (1σ) cal BC,
6,710±60 BP, 5,710–5,560 (1σ) cal BC,
6,670±70 BP, 5,650–5,530 (1σ) cal BC.
Kovačevo
7,245±36 BP, 6,210–6,050 (1σ) cal BC,
7,222±37 BP, 6,210–6,020 (1σ) cal BC,
7,235±40 BP, 6,210–6,040 (1σ) cal BC,

7,210±40 BP, 6,100–6,010 (1σ) cal BC,
7,180±45 BP, 6,080–6,000 (1σ) cal BC,
7,157±37 BP, 6,060–6,000 (1σ) cal BC,
7,140±40 BP, 6,050–5,990 (1σ) cal BC,
7,105±40 BP, 6,030–5,920 (1σ) cal BC,
7,090±70 BP, 6,030–5,890 (1σ) cal BC,
7,055±40 BP, 5,990–5,900 (1σ) cal BC,
7,028±35 BP, 5,990–5,880 (1σ) cal BC,
6,990±45 BP, 5,970–5,810 (1σ) cal BC,
6,980±65 BP, 5,980–5,790 (1σ) cal BC,
6,975±50 BP, 5,970–5,790 (1σ) cal BC,
6,760±160 BP, 5,840–5,520 (1σ) cal BC,
6,830±85 BP, 5,800–5,630 (1σ) cal BC.

According to Todorova and Vaysov (1993, 89), the first phase of the EN in western Bulgaria is the so-called monochrome phase in which no painted ornaments are found – registered at some sites in Greece, Bulgaria and Serbia. From the sites that are the subject of this analysis, only one is included – Krajnici, determined within the earliest, monochrome or early ceramic phase (Todorova and Vaysov 1993, 75; Čohadžiev, Bakamska and Ninov 2007, 181). On the basis of the comparative method and the absolute chronology Todorova and Vaysov (1993, 89) propose the following periodization of the EN in Bulgaria: the monochrome phase or the BRN – M (Bulgarian EN – Monochrome) between 6,400–6,200 cal BC; the EN with white painted pottery Neolithic BRN – A (Bulgarian EN – phase A) (comparable to the Macedonian EN) between 6,200–5,700 cal BC; and the dark painted Neolithic or BRN – B (Bulgarian EN – phase B) (comparable to the Macedonian MN) between 5,700–5,500 cal BC.

On the basis of the absolute dates, the above mentioned authors created periodization of the Macedonian and Bulgarian EN. In this context, I propose the acceptance of the highest values according to Todorova and Vaysov for Western Bulgarian Neolithic and the highest values for Macedonian Neolithic according to Gimbutas with wider range for the EN dates, be-

tween 6,200–5,800 cal BC. The same should be made, for the MN or the second phase of the EN (phase B) according to the Bulgarian archaeological school (see below) in the interval 5,800–5,500 cal BC.

Cultures, cultural zones, blocks and complexes

By using comparative approach, primarily on the basis of analyzes of pottery and absolute chronology, in North Macedonia and Bulgaria, several cultures, cultural zones, blocks and complexes have been defined. Key factor for these determinations were forms' analysis and pottery decoration. According to Todorova and Vaysov (1993, 74, 89, 98–99), monochrome vessels or Monochrome Neolithic is unequally present and scarce in the earliest appearance of Neolithic in Bulgaria and in the larger Balkans' territory. Generally, the rounded forms of red colored vessels and the appearance of a white painted ornamentation on a red (reddish) background are typical for the EN on a very wide area in the Balkans (Gimbutas 1976b, 37–65; Garašanin 1979, 92; Garašanin 1989, 27; Nikolov 1990, 11; Todorova and Vaysov 1993, 89; Sanev 1995; Nikolov 2003, 103, Sanev 2004). In North Macedonia, according to most of the authors, the next phase after EN – the MN, is characterized by identical forms that originate from the EN phase, but with a dark painted ornamentation (Gimbutas 1976b, 37–65; Garašanin 1979, 92; Garašanin 1989, 27; Sanev 1995; Sanev 2004). The MN within the Bulgarian archaeological school is only a hypothetical phase and should be referred to as late or second phase of the EN (Nikolov 1990, 11; Todorova and Vaysov 1993, 77, 78, 107; Nikolov 2003, 103; Čohadžiev 2007, 92).

In North Macedonia, the EN is registered in three cultures: Amzabegovo-Vršnik (eastern and northwestern parts of North Macedonia), Velušina-Porodin (southwestern part of North Macedonia – Pelagonia) and Zlastrana (Ohrid region) (Fig 2) (Fidanoski 2009a, 31). These cultures were formulated by Garašanin and Sanev, with a special emphasis on the first of them, Amzabegovo-Vršnik, which, unlike-

others contains also contains MN phases i.e., the phase Amzabegovo-Vršnik I belongs to the EN, and the phases II–IV to the MN (Garašanin 1979, 90–92; Sanev 1995, 29). According to Gimbutas, the LN is present at the site of Barutnica-Amzabegovo, and on the basis of her research she created chronology for the site, thus – the phase Amzabegovo I belongs to the EN, phases II–III to the MN and phase IV to the LN (Gimbutas 1976b, 29). Nikolov (1999b, 2) formulates a new group, Kremenik-Amzabegovo, and places it chronologically as second phase of the EN. Velušina-Porodin culture with the determined four phases (I–IV) belongs only to the EN, although most of the authors consider that the MN phase(s) also occurs (Garašanin 1979, 108; Simoska and Sanev 1975, 77, 78, 82; Sanev 1995, 40–42; Fidanoski 2009a, 31–32). Concerning the considered sites in this study, Barutnica-Amzabegovo and Cerje-Govrlevo belong to Amzabegovo-Vršnik culture, while Veluška Tumba-Porodin, Čuka-Topolčani and Vrbjanska Čuka-Slavej belong to Velušina-Porodin culture (Fidanoski 2009a, 34).

The Bulgarian EN sites considered in this study were included in different cultures by different authors (Fig 3). According to Todorova and Vaysov (1993, 98–105), Slatina-Sofia and Gălăbnik belong to the culture of the Western Bulgarian Painted Pottery Neolithic, and according to Nikolov (1996a, 1) and Pavúk (2007, 165) both sites form separate cultures i.e. Slatina-Sofia in its early phase belongs to the culture of Slatina, and in its later phase to that of Kremikovci (Nikolov 1999c, 1–2). Gălăbnik is the eponymous site for the Gălăbnik culture (Nikolov 1996b, 2). Phases from 1 to 7 of the Gălăbnik EN, according to Pavúk and M. Čohadžiev, belongs to the Protostarčevo culture, and in later EN phase (parallel with the MN of the Macedonian chronology) belongs to the Starčevo culture (Bakamska 2007, 175). The above mentioned monochrome or Early Ceramic site Krajnici consisting three horizons of living, the earliest of which is characterized only by monochrome pottery and is thus determined (with-

out cultural affiliation), while the other two horizons belong to the Gălăbnik EN (Čohadžiev et al. 2007, 182). According to Nikolov (1996a, 1), Rakitovo and Kovačevo belong to a *southwestern variant* of Karanovo I culture. As far as Kovačevo is concerned, its researchers carefully place the site closer to the contact zone of Greece (Nea Nikomedeia and Giannitza) and North Macedonia (Barutnica-Amzabegovo and Veluška Tumba-Porodin), but not in Karanovo culture (Lichardus-Itten et al. 2002, 130). On the other hand, for Pavúk (2007, 165) Kovačevo should be considered a separate culture. Similar to Kovačevo, the researcher of Vaksevo (Studena Voda), S. Čohadžiev (2001, 58–59), according to the material from the earliest phases, argues that there are many similarities with Kovačevo Ia and Ib, and in the later phases with Karanovo I. The end of the site's EN (comparable to the Macedonian MN) the author places within Starčevo culture.

In archaeology, as in other related disciplines, certain terms are defined in order to obtain more detailed picture of the cultural, social and economical heritage and the reconstruction of human life in the past, while at the same time facilitating the analysis and assisting in methodological approaches. However, the specialized terminology and definition of (cultural, social, economical, etc.) prehistoric communities' categories hide many pitfalls at the very start of any analysis.

The framework of our basic notion of "archaeological culture" has proved to be very narrow for the interpretation of the observed broad-band synchronous and diachronic phenomena. This imposed the use of a new scientific toolkit which enables systematic-structural analysis. With this certain structural units, their hierarchy and the dynamics of their development can be established, which for prehistory is equal to the reconstruction of the basic, available to us, tendencies of the historical process. Later, a number of new transregional terms have emerged, such as "cultural-historical zone", "ethno-cultural complex", "metallurgical

province" and others /.../. Of particular importance is the view that within the cultural blocks, the historical processes flow in parallel: cultures cross through synchronous stages of development, appear and leave at the same time. In this context it can be said that global historical processes are reflected in the development of the blocks. From a historical point of view, in fact, there would be no historical tendencies that concern only one archaeological culture without affecting the neighboring ones. Cultural blocks, even territorially constrained, do not represent constant formations in the diachronic plane. They react flexibly to the various changes in the natural environment and to the various influences – they reorganize internally, transformed, disappear, and reappear, so in each particular case the model of their changes should be analyzed individually. (Todorova and Vaysov 1993, 69–71)

The quotation above vividly explains the need to form new terms that would enable easier insight into the everyday life of the prehistoric man, the characteristics of the community, the elements of culture and the structure of economy. Having in mind the above mentioned cultures in North Macedonia and Bulgaria (especially the different cultural determinations for the western Bulgarian sites), the question arises whether a more developed system is really needed – *a new scientific toolkit which enables systematic-structural analysis*, by means of which – *certain structural units, their hierarchy and the dynamics of their development can be established?* Before addressing this question, a little bit more about the cultural zones, blocks and complexes should be said.

As it was already stated, Kovačevo (I) according to its researchers (Lichardus-Itten et al. 2002, 130), is the core site of a wide zone of close influence between it, Giannitza and Nea Nikomedeia in Greece, as well as Veluška Tumba-Porodin and Barutnica-Amzabegovo in North Macedonia. According to Pavúk (2007, 165), the cultures of Gălăbnik, Slatina-Sofia and Amzabe-

govo-Vršnik belong to the Starčevo and Protostarčevo *zones*, and the cultures Kovačevo (Bulgaria), Velušina-Porodin (North Macedonia), Giannitza (Greece) and Podgori (Albania) in the *southern trans-Balkan zone* or in the *zone* of Sesklo (Greece) – which reaches Protostarčevo in its northern boundary. Nikolov (1990, 11) defines, in the wider Central Balkans region, four ethnocultural complexes: Kremenik-Amzabegovo, Kremikovci, Gradešnica-Kărča and Starčevo. In the literature of former Yugoslavia, and mainly for that territory, the following four zones were suggested: *Central Balkan*, *Adriatic*, *Transitional* and *Northern* (Benac, Garašanin and Srejović 1979a, 24). In the course of defining the sites and cultures' characteristics, in the former Yugoslavian science and wider, the *Balkan-Anatolian EN complex* and the *Northern Balkans-Panonian complex* (Benac, Garašanin and Srejović 1979b, 642) are also known. Todorova and Vaysov (1993, 74), for the *Balkan-Anatolian EN complex* refer as *Balkan-Anatolian cultural block*. Within the Adriatic zone, the cardium-impresso culture was determined (Batović 1979, 484), that Todorova and Vaysov (1993, 74) insert into a wider geographical and cultural area, the so-called *Mediterranean EN block*. Finally, the same authors, Todorova and Vaysov (1993, 77), the second or later phase of the EN (according to the Bulgarian archaeological literature) or the MN (according to the Macedonian literature) in the Central Balkans region and Thessaly, established the complex of EN cultures with painted pottery.

Bearing in mind the already discussed models for cultural determination and interpretation, it is noticeable that many sites were included in different cultures, zones, blocks and complexes, often artificially determined. This, in my opinion, is due to the complexity of the rich material culture from a large territory in the Balkans, which contains both similarities and differences. The problem is even more pronounced with the almost regularly encountered cultural occurrence at the sites – the thick deposits of several layers, whose phases rarely coincide with each other, and also at some sites the phase-to-

phase gaps are registered. In the end, Balkan prehistoric archaeology, on the basis of a large database, quite inadvertently, enters the trap of predetermined (artificial) models created by the need for defining material culture.

Neolithic legacy: pottery, architecture and animal husbandry

From the archaeological investigations of Macedonian and Bulgarian sites a rich fund of movable and immovable cultural heritage has been collected. Previously, on several occasions, the significance of the material culture was underlined in the attempt to reconstruct the Neolithic populations' life on this territory. Therefore, in the analysis below, I will look at three key elements of this really rich prehistoric period: pottery, architecture and animal husbandry.

Pottery

One of the key Neolithic innovations was pottery. Aside its significance in social, economical and cultural means, especially in the mental shifts of the first communities that created it, its mass appearance at Neolithic sites is obvious. The Balkans' Neolithic pottery is known by its high quality and quantity and thanks to it, the image of the Neolithic continuity was created.

About the Balkans' Neolithic pottery, a lot of studies have been published so far, more or less, based on the basic elements for pottery research and analysis (Shepard 1956; Rice 1987; Sinopoli 1991; Nikolov 1998). The properties, meaning and significance of EN, MN and LN pottery from the Macedonian and Bulgarian sites were elaborated in numerous works (Gardner 1976; Gimbutas 1976b; Mock 1976; Mount-Williams 1976; Garašanin 1979; Nikolov 1982; Sanev 1995; Nikolov 1998; Nikolov 2002b; Čohadžiev 2007; Vaysov 2007; Fidanoski 2009b; Lichardus-Itten 2009; Salanova 2009; Vieugué, Gormart and Salanova 2010; Angeleski 2012). The main focus here will not be manufacturing technology, forms' analysis or classification, but the comparative aspect of pottery collected on different sites and regions in both countries.

Figure 4. North Macedonia Barutnica-Amzabegovo. 1 (Fidanoski 200 9b, Pl. 16, 2); 2, 3 (Garašanin and Garašanin 200 9, T. III, 1, 170; T. VI, 2, 173); Cerje-Govrlevo 4, 5 (Naumov 200 9d, Fig. 853 125); Bulgaria Slatina-Sofia. 6 (Nikolov and Sirakova 200 2, Taf. 9, 4, 187); Krajnici 7 (Čohadžhiev et al. 200 7, Fig. 6, 2, 185); Vaksevo 8 (Čohadžhiev 200 1, Fig. 28, 16, 97); Kovačevo 9–11 (Lichardus-Itten et al. 200 2, Pl. 15, 3 8, 2, 15).

In literature the Balkans' EN pottery is recognized by rounded forms, especially the most characteristic vessels – bowls and jars (and jar-like forms). The most common color is red with various dark and pale nuances, on which (especially on the bowls) is painted ornamentation with white or black pigment. It should be stressed that painted pottery is very scarce on the sites bearing individual and collective, technological, symbolical and social properties within the communities, thus being one of the more relevant chronological and cultural markers for comparison. *Jars* (jar-like) vessels comprise many different types, some of their variants are almost identical with bowls and interestingly they can be decorated by almost all known Neolithic decoration techniques. Hence, apart from the characteristic forms and decorations the comparisons of these vessels decorated with rarely practiced techniques, between one site and another, that is, between culture and culture, can lead to more confusion. The situation is worse with the *plates* – the most abundant form on the Neolithic sites, which are chronologically and culturally almost indifferent of changes in the EN and MN phases/periods.

Bowls are one of the abundant forms in Balkans' EN and MN pottery represented by many variants and subtypes. According to Stoilov-Bunkera (1992, 130), the bowls from Slatina-Sofia, were coil made (building a vessel of clay bands which are placed in vertical rows one above the other, later covered with wet clay), which can be accepted as the main manufacturing technique for other EN and MN Balkan Neolithic sites. In the EN phase of Amzabegovo-Vršnik culture the bowls are characterized by (almost) equal height and width of the rim (Fidanoski 2017b, 126), and very often have a slightly larger belly diameter (Fig. 4: 1–5). Generally, the rim is stressed and the bottom can be flattened (Fig. 4: 1, 2) or discoid (placed on a very shallow ring) (Fig. 4: 2). Similar forms can be found in Cerje-Govrlevo (Fig. 4: 4, 5). The specimens from Barutnica-Amzabegovo in some cases have two or four handles resembling vertically perforated,

massive applied ellipsoid clay mass (Fidanoski 2009b, Pl. 15, 5, 6, 11). There are almost identical variants from the earliest living horizons of Slatina-Sofia (Fig. 4: 6) and Krajnici (Fig. 4: 7). One specimen from Vaksevo (Fig. 4: 8) is very similar to the more opened bowl from Barutnica-Amzabegovo (Fig. 4: 3). The bowls with slightly closed rims – the variants of Kovačevo (Fig. 4: 9–11) are similar with two from Barutnica-Amzabegovo (Fig. 4: 1, 2). Closeness of these variants is also noticed in the MN (the second phase of the EN according to the Bulgarian literature), where the same forms continue, with one difference – the appearance of high conical, hollow leg (a feature which should be regarded conditionally, see Fidanoski and Tomaž 2018, 138). However, the presence of these (MN) legs is well documented in the MN layers of Barutnica-Amzabegovo (Fig. 7: 1–3), Cerje-Govrlevo (Fig. 7: 4, 5) and in the later horizons of Gălăbnik (Fig. 7: 6, 11). The bowls' dimensions vary between 14 and 20 cm, rarely exceeding the larger value.

These vessels' color varies in all hues of red, orange, brown and even black. Namely, one of the characteristics of the EN pottery (and also MN in the Macedonian literature) according to literature so far, is the red-engobed bowls production. Generally, it is considered that on their surface the painted ornaments with pale hues of white and yellowish pigment, are typical for the EN (Fig. 4), and in the MN the bowls painted with ornaments of reddish, brownish and black pigment (Fig. 7). However, the cultural and chronological differentiation on the basis of this pale and dark ornamentation should also be considered conditionally (Gardner 1976, 171; Fidanoski and Tomaž 2018, 138). Concerning the ornamental systems the white painted bowls from Barutnica-Amzabegovo and Vaksevo are characterized by more dynamical, even 'organical' (vegetal?) motifs, unlike those from Cerje-Govrlevo and Kovačevo painted with geometrical motifs. However, due to limitations of space to present here all the white painted specimens from the mentioned sites, I underline that depending on the EN stages/phases

es or affinities, two general types of motifs can be found at all sites. Here, only those who illustrate the greatest similarities are presented. The situation with MN bowls is similar, hence the stricter geometrical-linear motifs and compositions are found in Barutnica-Amzabegovo (Fig 7: 1, 2), Cerje-Govrlevo (Fidanoski and Tomaž 2018, Figs. 22, 23), Gălăbnič (Fig 7: 6) and Slatina-Sofia (Fig 7: 7). The more dynamic compositional structures of this phase/s include certain almost figural representations created by spiraloid or/and meandroid rows, such as in Barutnica-Amzabegovo (Fig 7: 3), Cerje-Govrlevo (Fig 7: 4, 5), Gălăbnič (Fig 7: 10, 11) and Slatina-Sofia (Fig 7: 8, 9). However, it should be pointed out that the MN dark painted bowls are very similar in forms and ornamentation structures on a much larger territory than North Macedonia and western Bulgaria. Such specimens are often discovered in Kosovo, Serbia, Croatia and Romania, thus providing space for more general interpretations such as establishing cultural complexes in the literature especially in the past. Therefore, it is understandable that this period is often identified as EN (or MN) period (or culture) of Starčevo.

The bowls from Velušina-Porodin culture belong exclusively to the EN, bearing in mind that MN phase(s) was not documented (see in the previous chapter). The only specimen (from Vrbjanska Čuka-Slavej) which is similar to the previous ones from this culture (Fidanoski 2009b, Pl. 44, 18), clearly demonstrates the cultures' admixtures and problems of interpretation and periodization. Concerning manufacturing technology, it is safe to say that it is the same as the above mentioned. Having in mind the typological spectrum of the pottery of Velušina-Porodin sites, I consider that the essential characteristics of this culture are the bowls forms, as well as jars with high necks (Fidanoski 2009b, Pl. 34, 5; Pl. 43, 12; Pl. 67, 1–3). The bowls of this culture have elongated forms, slightly or heavily stressed rim inwards, rounded or carinated belly that almost always ends in a rounded or slightly flattened bottom (Fig 5: 1–6). The cari-

nated bowls from Čuka-Topolčani (Fig 5: 1) and Veluška Tumba-Porodin (Fig 5: 2, 3) have direct analogies in the material from the earlier horizons of Gălăbnič (Fig 5: 7–9), showing minimal differences in the milder belly carination and the discoid bottoms, and even in some cases also with the high cylindrical formed bottom (Fig 5: 7). The rounded bowls of Veluška Tumba-Porodin (Fig 5: 4) and Vrbjanska Čuka-Slavej (Fig 5: 5, 6), on the other hand, point to close analogies with the material from the early living horizons of Slatina-Sofia (Fig 5: 10, 11) and Rakitovo (Fig 5: 12). The specimens from Vrbjanska Čuka-Slavej are also interesting for their unique decoration – the protuberances, which are typical only for this site. Given that there is scarcity of published material on paint-decorated bowls from Velušina-Porodin culture, except one white painted specimen with motifs in the form of the Greek letter Σ (Todorova and Vaysov 1993, Fig. 59, 69), as well as several jars and jar-like vessels with the same ornamentation, Pavúk (2007, Abb. 2, 13, 168) logically finds, on the basis of ornamentation, analogies in Kovačevo. Additional interpretation problems in the comparative and cultural studies are the various composition systems painted on the bowls from Gălăbnič and the specimens from Slatina-Sofia. Namely, two of the Gălăbnič bowls (Fig 5: 7, 9) have some analogies in ornamentation with some specimens from Velušina-Porodin culture. These also have similarities with the ornamentation of Amzabegovo-Vršnik culture, and finally one specimen of Gălăbnič (Fig 5: 8) and one of Slatina-Sofia (Fig 5: 10), on the basis of the ornamentation, have no close analogy with the other sites or cultures. Given the complexity of the ornamentation, both within and out of the sites, the focus should be set more on forms than decoration, thus I consider that Veluška Tumba-Porodin and Vrbjanska Čuka-Slavej have a great familiarity with Gălăbnič, Slatina-Sofia and Rakitovo.

Two more phenomena that can be seen on the EN (and MN) painted pottery from western Bulgaria should be noted, but in North Macedonia they are very rare or do not exist. The painted

Figure 5 North Macedonia Čuka-Topolčani 1 (Fidanoski 2009b, Pl. 39, 8); Veluška Tumba-Porodin 2–4 (Fidanoski 2009b, Pl. 30, 2–4); Vrbjanska Čuka-Slavej 5, 6 (Fidanoski 2009b, Pl. 41, 15, 16); Bulgaria Gălăbnik 7–9 (Pavúk 2007, Abb. 3, 6–8, 169); Slatina-Sofia 10, 11 (Todorova and Vaysov 1993, Fig. 41, 42, 299); Rakitovo 12 (Macanova 2002, Taf. 12, 2, 217).

ornamentation of the (visible parts of the) bottoms, especially the higher ones, is nowhere to be found in Macedonia. Also painting of the plates (both on the inside and outside), which is especially common in western Bulgaria, is very rare in North Macedonia.

The precise conceiving and employment of the painted compositions, as well as the active using of the iconography in the accentuation of the local identities clearly indicates the mental capacity of the Neolithic populations which settled Macedonia and the Balkan Peninsula in general. This potential for detailed organizing of a micro space (a vessel), but also a larger cultural environment (a settlement), points to the complex character of the visual culture applied in the symbolic communication. Hence, it can be considered that the painted compositions did not content geometrical principles only for the simple enhancement of the vessels, but also because of the implementation of more complex and essential concepts of the Neolithic communities. The employment of symmetry within the imagery media is often in relation with the metaphorical transposition of the permanent values of one culture and its essential living processes.

In this context it can be considered that the Neolithic painted compositions were closely related to the processes that consolidate the unity of the communities and made possible the maintenance of their continuity. (Naumov 2009d, 125)

One could conclude that every closed geographical space (valley or plain) enabled suitable conditions for isolated, independent existence of the communities, which succeeded to develop specific visual characteristics in each region for a really short time. It points to the fact that the communities inhabiting these regions: i) have already had developed authentic visual features, prior to settling there, ii) developed new local visual identities contacting with the native

Mesolithic populations and iii) gradually formed autochthonous cultural characteristics as they moved from the point of origin, regardless of whether those were Thessalian or Anatolian settlements.

Later, probably in the following Neolithic phases [in North Macedonia], a more intense communication among these regions commenced, which resulted in occurrence of similarities in the painted patterns, alternately in each region. Such visual communication culminated in the Middle Neolithic when within what is now considered Amzabegovo-Vršnik group, identical motives and composition units could be identified, equally in the regions of Ovče Pole, Skopje and Polog. In the same period the communities from Pelagonia continued using the 'old' visual elements on the vessels, which shows that the Early Neolithic traditions have much longer continuance in this region, partly entering what could conditionally be referred Middle Neolithic. (Naumov 2009d, 23)

Of special interest is one unusual variant of jars with a horizontally elongated form, an almost imperceptible rim (which seems more like an opening in the body than a rim), and a rounded bottom (Fig. 6: 3–6). Such variants of jars are very rare in Balkan's EN (and MN) even for well-studied collections. Within this study five specimens are analyzed: Vrbjanska Čuka-Slavej, Čuka-Topolčani and Veluška Tumba-Porodin from Velušina-Porodin Culture; Rakitovo (Karavano culture) (Nikolov 1996a, 1); and Čavdar from the culture of Western Bulgarian Painted Pottery Neolithic (Todorova and Vaysov 1993, 20, 293, 97–99). The specimen from Vrbjanska Čuka-Slavej (Fig. 6: 3) is unique due to its perforated (horizontal) handles, but given its slightly carinated form it is analogous with the jar of Veluška Tumba-Porodin (Fig. 6: 5). The jars from Čuka-Topolčani (Fig. 6: 4), from Rakitovo (Fig. 6: 6) and Čavdar are characterized by a well rounded form. That these vessels probably bear more than only utilitarian purpose, can be

Figure 6. North Macedonia Cerje-Govrlevo 1 (Fidanoski 2011, Fig. 21, 85); 7 (Fidanoski 2012, Fig. 62); Vrbjanska Čuka-Slavej 3 (Fidanoski 2009b, Pl. 42, 6); Čuka-Topolčani 4, 5 (Fidanoski 2009b, Pl. 40, 1; Pl. 66, 5); Bulgaria Vaksevo 2 (Čohadžiev 2001, Fig. 19, 88; photo by Lj. Fidanoski); Rakitovo 6 (Macanova 2002, Taf. 12, 2, 217); Krajnici 8 (Tchodadjiev and Bakamska 1990, Tabl. 25, 1, 75).

Figure 7. North Macedonia Barutnica-Amzabegovo 1, 3 (Gimbutas 1976b, Fig. 35.2, 58 Fig. 29.1, 52); 2 (Garašanin and Garašanin 2009, T. XXI, 1, 188); Cerje-Govrlevo 4, 5 (Fidanoski 2009b, Pl. 58.4, 5); Bulgaria Gálábnik 6 (Čohadžiev 1990, Fig. 7, 11, 14); 10, 11 (Todorova and Vaysov 1993, Fig. 11, 12, 292); Slatina-Sofia 7–9 (Sirakova 2004, Fig. 1, 2, 16; Fig. 2, 1, 18; Fig. 4, 2, 22).

concluded based on the painted ornamentation (with pale white paint on their entire surface, except for the specimen from Čuka-Topolčani, which has dark brownish/black paint). Their composition is dynamic and diverse, for which is difficult to find analogies in related cultures.

Askoi are rarely found in the Neolithic, with the exception of some sites in North Macedonia, but this is a topic for another study. Of interest for this paper is the askos discovered in Vaksevo, which has analogies with the specimens from Cerje-Govrlevo, thus suggesting very probable communication (Fig. 6: 1, 2). Here presented specimen from Cerje-Govrlevo (Fig. 6: 1) is typical for the site – with an eccentrically manufactured neck on an irregularly rounded belly (the severe irregularity probably derives from secondary reasons as layer/deposit destructions and fire), while the one from Vaksevo (Fig. 6: 2) is characterized by a centrally placed neck on a curved belly. Minor differences are present within the handles' position – the handles on the specimen from Cerje-Govrlevo are placed more apart and the fifth handle is placed higher, than those on the specimen from Vaksevo.

At the very end, I point to two more specimens of ceramic objects. This category of objects contains a wide range of artifacts: anthropomorphic and zoomorphic representations, altars, tables, models of houses, anthropomorphic models of houses, and sometimes a combination of some of them – well defined by Naumov (2010, 234) as *Neolithic concepts of hybridism*. Given the economical, social and symbolic complexity of this ceramic objects' category, a completely different analysis is needed to clarify some of the questions arisen concerning these objects. For this study, I decided to present only two almost identical altars of three-legged tables found in Cerje-Govrlevo (Fig. 6: 7) and Gălăbnik (Fig. 6: 8). They are made of bulky clay lump, well flattened and smoothed on the upper surface with a shallow oval recipient, placed on three legs on the corners, thus forming a triangular object. Both specimens have the same ornaments of triangular incisions in parallel rows on the upper

surface and on the legs. In a word, they are very interesting for this study given that they appear as if they were made by one manufacturer.

Architecture

The settlement of Cerje-Govrlevo was positioned on a flattened terrace (plateau) on a mountain slope, surrounded by two streams and several mountains (Bilbija 1986, 35). Relatively similar to the previous one is the settlement of Barutnica-Amzabegovo which was settled on a river terrace, in a hilly relief (Weide 1976). Both of them belong to the so-called flat settlements (or settlements on river terraces). In contrast, the settlements in Pelagonia – the ones of Velušina-Porodin culture are mounds, such as Veluška Tumba-Porodin, Čuka-Topolčani and Vrbjanska Čuka-Slavej, thus artificially made, slightly higher than the surrounding area. Pelagonia Plain which is the largest plain in North Macedonia is characterized by small rivers and swamps in some periods of the year (Naumov et al. 2018, 256–57). These not so high elevations (mounds or tells), referred as *mogila*, *čuka* or *tumba*, are often the toponyms from which the name was derived. In western Bulgaria, low elevated settlements are rare, unlike flat settlements on river terraces, which in Thrace is opposite (Todorova and Vaysov 1993, 150). Except Gălăbnik, being a mound – has settlement analogies with the Pelagonia sites (artificial elevation), the rest of them (Slatina-Sofia, Krajnici, Vaksevo, Kovačevo and Rakitovo) were positioned on river terraces in the immediate vicinity to mountainous relief (Nikolov 1992; Todorova and Vaysov 1993, 150; Lichardus-Itten et al. 2002; Bakamska 2007, 175; Čohadžiev 2007; Čohadžiev et al. 2007, 182). In that context, the affinity of settling flat areas on river terraces in Amzabegovo-Vršnik culture and almost all sites in western Bulgaria, except Gălăbnik is evident – unlike the settlements of Velušina-Porodin culture and Gălăbnik.

Concerning architecture, in all the sites included in this paper, without exception one common element is present – the aboveground houses were built of wooden construction daubed in

clay (Čohadžhiev 2007, 63; Tolevski 2009, 61–62). However, within three settlements: Barutnica-Amzabegovo, Gălăbniĳ and Kovaĳevo, the mud-brick technique has also been used (Gimbutas 1976b, 32, 34; Čohadžhiev 2007, 63). Talking about houses' groundplans, there are examples with a rectangular, square and trapeze plans. Houses with rectangular and square foundations were discovered in Cerje-Govrlevo, Veluška Tumba-Porodin, Vrbjanska Čuka-Slavej and Gălăbniĳ (Grbić et al. 1960, 12; Mitkoski 2005, 33, 35; Čohadžhiev 2007, 63; Fidanoski 2012, 35). The houses with a trapezoidal groundplans are much more frequent and are registered in Cerje-Govrlevo, Barutnica-Amzabegovo, Veluška Tumba-Porodin, Slatina-Sofia and in large number in Rakitovo (Grbić et al. 1960, 20; Nikolov 1999d, 101; Radunĳeva 2002, 14–33, 50; Sanev 2009b, 40; Fidanoski 2012, 35). Concerning objects' size (Grbić et al. 1960, 12; Zdravkovski 1990, 75–6; Nikolov 1999c, 101; Radunĳeva 2002, 14–33; Mitkoski 2005, 33, 35; Čohadžhiev 2007, 63; Sanev 2009b, 40; Fidanoski 2012, 35, 41), there are houses with different dimensions, as in

Cerje-Govrlevo (4 x 4,5 x 4,5 x 4,7 m, 5,5 x 5,5 m, 7,6 x 6 m);

Barutnica-Amzabegovo (8,3 x 8,7 m);

Veluška Tumba-Porodin (6 x 4 m, 12 x 11 m);

Vrbjanska Čuka-Slavej (9 x 12,5 m – first house phase of house 1, 11,3 x 13 m – second phase of house 1, 8,7 x 10,3 x 4,9 m);

Gălăbniĳ (4,5 x 5,7 m, 5,2 x 6,7 m, 6,6 x 7,2 m, 7,4 x 6,8 m, 7 x 8,8 m);

Slatina-Sofia (9,7 x 9,3 x 12,4 x 12,3 m);

Kovaĳevo (4 x 4 m, 4 x 6 m, 5 x 6 m, 10 x 10 m) and

Rakitovo (second EN phase – 7,4 x 7,4 x 3 x 3,1 m, 7,4 x 7,4 x 4,3 x 6 m, 7,5 x 4 x 3,8 m, 7 x 7 x 4 x 3,5 m, 7,4 x 6,5 x 3 x 4 m, 7,6 x 7,8 x 7,6 x 5 m, first EN phase – 4 x 5,5 x 2 x 1 m, first phase of house 13 – 5,5 x 5,5 x 3,5 x 4,7 m, second phase of house 13 – 4 x 7,5 x 4 x 8 m, 10 x 7 x 3 m).

Of particular interest for the topic is another element (except the inventory in which almost always an oven was constructed, and sometimes even a parapet walls) – the floor construction. In general, the most common are two techniques: 1. a thick layer of tamped clay and over it another final layer of clay/mud and 2. a construction of parallel wooden piles covered by clayish layer. Unfortunately, in this respect, we do not have much data except for Slatina-Sofia, where a well-preserved house whose floor is derived from the second technique was documented (Nikolov 1992). In North Macedonia, both in Cerje-Govrlevo and Veluška Tumba-Porodin, both techniques are used, with one difference. In the first settlement within the earliest phase of living, the floor was made with the second technique, and in the following (MN phases) the floors were made by the first technique – which is vice versa in Veluška Tumba-Porodin (Simoska and Sanev 1975, 44; Fidanoski 2012, 47).

Animal husbandry

Analyzing the faunal remains of the Balkans' EN and MN sites, several regional tendencies can be noticed. Unfortunately, in North Macedonia archaeozoological analyzes are rare (Ivkovska 2009, 53) and hence, the data on this important economical, social and cultural aspect is very limited. However, the faunal analyzes of the material from all phases of Barutnica-Amzabegovo are thorough, from which the ones belonging to the EN (phase I) and the ones of the MN (phases II and III) are the most interesting for this study. In contrast to North Macedonia (Bökönyi 1976, Tab. XXXIII), in Bulgaria (Bökönyi 1992, Tab. 1; Ninov 2001, Tab. 8; Bencke and Ninov 2002, 558; Kovaĳev and Georgiev 2002, Tab. 1; Čohadžhiev 2007, Tab. 6) the level of archaeozoological data is much better:

Barutnica-Amzabegovo (domestic animals from phase I – 96,58%, from phase II – 97,07% and from phase III – 94,23%; wild animals from phase I – 3,42%, from phase II – 2,93% and from phase III – 5,76%);

Kovačevo (domestic animals – 97,2% and wild animals – 2,8%);

Slatina-Sofia, horizon 1 (domestic animals – 90,64% and wild animals – 9,36%);

Krajnici (domestic animals – 87% and wild animals – 13%);

Rakitovo (domestic animals – 70,79% and wild animals – 29,21%) and

Vaksevo (domestic animals – 69,8% and wild animals – 28,4%).

Concerning domestic animals distribution, more differences were noted. So, apart from everywhere marginally present dogs, the relations between sheep/goat, cattle and pig differ in all sites (Bökönyi 1976, Tab. XXXIII; Kovačev 1988, Tab. 8; Bökönyi 1992, Tab. 1; Ninov 2001, Tab. 8; Benecke and Ninov 2002, 558; Čohadžiev et al. 2007, 188):

Barutnica-Amzabegovo (phase I: sheep/goat – 78,3%, cattle – 9,6% and pig – 8,26%; phase II: sheep/goat – 72,4%, cattle – 13,47% and pig – 9,87% and phase III: sheep/goat – 76,42%, cattle – 6,84% and pig – 8,83%);

Kovačevo (sheep/goat – 52,6%, cattle – 29,8% and pig – 17,6%);

Slatina-Sofia, horizon 1 (sheep/goat – 42,86%, cattle – 46,68% and pig – 9,98%);

Krajnici (sheep/goat – 38,8%, cattle – 55,5% and pig – 5,7%);

Rakitovo (sheep/goat – 28,98%, cattle – 62,81% and pig – 7,79%) and

Vaksevo (sheep/goat – 12,38%, cattle – 64,6% and pig – 21,23%).

According to the faunal remains one general conclusion can be made: the dominant economical aspect of EN and MN sites is stock-breeding, the role of hunting is marginal, with almost equal distribution in Barutnica-Amzabegovo, Kovačevo, Slatina-Sofia and Krajnici, while in Rakitovo and Vaksevo the hunting had more important role. As for the domestic animals distribution, the higher percentage of sheep and goat in Barutnica-Amzabegovo and

somewhat less in Kovačevo, in Slatina-Sofia, the sheep/goat distribution is more or less equal with cattle, whereas in Krajnici, Rakitovo and Vaksevo, the cattle was preferred. Ivkowska (2009, 61–63) believes that this is primarily due to the climate – the cattle favors humid climate, unlike sheep and goat that prefer drier and warmer climates. Therefore, according to her, closer analogies with regard to the livestock structure have the southern (warmer and drier) parts of the Balkans – North Macedonia and Greece, while the Bulgarian and Serbian Neolithic animal husbandry is more oriented towards animals which prefer more humid environment.

Concluding remarks

Thanks to the archaeological research in the Balkans, today we have a vivid image of the Neolithic processes on this territory. The accumulated knowledge on this remarkable period of human history has already been more than a century old. But, still there is a plenty of space for new analysis and research, not only of newly discovered sites, but also for those who are well known today. The processes of Balkans neolithization, the earliest settlements, their development and communications even today present a challenge for many authors.

Based on the knowledge so far, the significance of the natural pathways for the first Neolithic settlers in the Balkans, the river flows of Vardar, Bregalnica, Struma, Mesta and others is confirmed. It was along their streams that the earliest Neolithic pioneers were moving and communicating with the remote regions of Pelagonia, Skopje and Ovče Pole Plains, the Struma Valley, the Sophia, Pernik and Radomir Plains, the Rhodope massif, etc.

In accordance with absolute chronology, relative chronology and the comparative method, the time intervals and phases in which the Neolithic communities flourished in the Balkans. Although there are still ambiguities regarding periodization, it can be concluded that in the period from 6,200 to 5,800 cal BC a large number of micro-regions were inhabited in North Mace-

donia and Bulgaria. In the period from 5,800 to 5,500 cal BC there is an absolute dominance of a large community/ies, regardless of whether we refer to it as the second phase of EN, MN, developed Neolithic, Starčevo, Amzabegovo-Vršnik, Kremikovci, Kremenik, etc.

In order to improve our knowledge about the Neolithic in North Macedonia and Bulgaria based on the analogies or closeness of the material culture, many cultures, cultural zones, blocks and complexes have been established. However, at this point they are not of great benefit because of the specificity that every site carries, especially in the EN. Without undermining the significance of the hierarchy in systematic and methodological approaches – long time ago introduced into archeology – material culture does not allow an absolute generalization of the communities that lived on this territory (and basically everywhere in the world) during a particular period. On the other hand, cultures and complexes are already firmly grounded in the archaeologists' minds; so, on this territory there are several cultures formulated: Amzabegovo-Vršnik, Velušina-Porodin, Western Bulgarian Painted Pottery Neolithic, Gălăbniak, Slatina, Kovačevo and Karanovo culture – all of these considered as members of the Balkan-Anatolian EN Complex. In this analysis, eleven sites have been individually considered: Barutnica-Amzabegovo, Cerje-Govrlevo, Veluška Tumba-Porodin, Čuka-Topolčani, Vrbjanska Čuka-Slavej (from North Macedonia), Slatina-Sofia, Krajnici, Gălăbniak, Vaksevo, Rakitovo and Kovačevo (from western Bulgaria).

Pottery, architecture and animal husbandry as a new phenomenon in the Neolithic are the essential economical, social and cultural aspects according to which we define the sites, cultures, etc. Based on the considered material culture in this study, differences were noted in all sites, but in the same time and more importantly, many analogies were found. In brief, in relation to the EN and MN painted pottery, Cerje-Govrlevo, Barutnica-Amzabegovo, Krajnici, Kovačevo, Vaksevo, Slatina-Sofia (later phases)

and Gălăbniak (later phases) show many similarities. The same can be concluded for the pottery from Veluška Tumba-Porodin, Čuka-Topolčani, Vrbjanska Čuka-Slavej, Rakitovo, Slatina-Sofia (earlier phases) and Gălăbniak (earlier phases). Accordingly, it can be concluded that in the EN, the material culture of Pelagonia has more similarities with the sites of the Struma Valley and Sofia Plain, and the sites of Skopje and Ovče Pole Plains have stronger communication with the same sites from the later phases of the same regions in Bulgaria. This thesis according to absolute chronology is problematic, which raises a number of questions that have yet to be answered.

Do we have a sufficient ^{14}C dataset?

Are the phases well and precisely defined or they need revision?

In which directions and in what way do remote groups of sites communicate?

On which factors is this communication dependent?

What is the number of unpublished material from the explored sites?

Has the time been right for new surveys and explorations of the known unexplored Neolithic sites?

Regarding the selected locations to form settlements there, on one hand there is tendency that some sites, as Cerje-Govrlevo and Barutnica-Amzabegovo and the Struma and Sofia Plain sites, to be positioned on river terraces, while on the other hand, the ones in Pelagonia and exclusively Gălăbniak (from Radomir Plain) artificially elevated the settlement space, thus creating mounds. It is logical to conclude that this is closely related to the natural environment and geomorphological features – the sites in plains and valleys are vulnerable to serious hydrological impacts and those on the river terraces or flat settlements rely on more stable water-level. The architecture itself is almost identical in all analyzed sites - aboveground houses built of wooden construction daubed in mud, rectangular,

square or trapeze groundplans and almost in all cases oven was made in the interior. Small differences are noted in building techniques, but this can also be considered as one of the specifics of each site or other economical, social or natural resources.

Finally, it can be concluded, on the basis of the animal husbandry, that almost in all sites for which there is archaeozoological data, there is absolute dominance of stockbreeding, while hunting was not so important. Larger differences are noted in the domestic animals distribution – the domination of the sheep/goat and cattle, which is in favor of sheep/goat in North Macedonia, which is not the case in Bulgaria. According to the studies this is probably a result of the different climatic conditions.

From all of the above mentioned we can conclude that EN (and MN) communities in North Macedonia and Bulgaria have very similar material culture, but each one preserves its own specificities that separate it from others. In fact, due to the inevitable economical (and social) contacts and natural (geographical) communication, these two pathways intertwine, thus not allowing either precise identification of their identity nor broad generalization.

Summary

One of the key topics of European prehistory – the Neolithization of the Balkans is still subject to a variety of explorations, polemics, ideas and hypotheses. Bearing in mind the geographical position of this territory in Southeastern Europe and wider in the immediate vicinity of the hotspot of the large (both Aceramic and Ceramic) Neolithic cultures and sites of the Eastern Mediterranean, in the second half and especially towards the end of the 7th millennium cal BC, a large number of Neolithic sites has been documented. The earliest Neolithic sites in Europe were discovered in Greece, which are characterized by a particularly authentic material culture, and later a number of EN sites were discovered in North Macedonia, Bulgaria, Serbia, Romania, and a smaller number in Albania. Considering the rich material culture some sites from North Macedonia and Bulgaria are of special interest, which apart from the visi-

ble differences, are distinguished by great similarities in some categories of artefacts, in different micro-regions within the two countries. Hence, the paper focuses on discovering the causes of similarities in certain artefacts in communities that, although living in the same period, practice almost the same lifestyle, but are somewhat characterized by a relatively different material culture.

Povzetek

Ena ključnih tem evropske prazgodovine - neolitizacija Balkana je še vedno predmet številnih raziskav, polemik, idej in hipotez. Upoštevajoč geografski položaj ozemlja v jugovzhodni Evropi in širše v neposredni bližini žarišča velikih neolitskih kultur ("keramičnih" in "akeramičnih"), je bilo tu dokumentiranih veliko število neolitskih najdišč, ki sodijo v čas druge polovice, oziroma na konec 7. tisočletja pred našim štetjem. Najstarejša neolitska najdišča v Evropi so bila odkrita v Grčiji. Zanje je značilna še posebej avtentična materialna kultura. Pozneje so bila odkrita številna zgodnjeneolitska najdišča še v Severni Makedoniji, Bolgariji, Srbiji in Romuniji ter manjše število v Albaniji. Glede na bogato materialno kulturo so še zlasti zanimiva nekatera najdišča Severne Makedonije in Bolgarije, ki jih v različnih mikroregijah v obeh državah poleg vidnih razlik odlikujejo tudi velike podobnosti v nekaterih kategorijah artefaktov. Prispevek se osredotoča na odkrivanje vzrokov, ki so botrovali podobnostim nekaterih artefaktov v teh skupnostih, katere, čeprav živijo v istem obdobju in prakticirajo skoraj enak življenjski slog zaznamuje precej drugačna materialna kultura.

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