Board Games Reconsidered: Mancala in the Balkans*

Abstract: Two mancala (one of the oldest games in the world) boards, which were found in the Lower Town of the Belgrade Fortress in 2006, present so far unique archaeological proof that this game was played in the region of the Balkan peninsula. Considering the fact that the knowledge regarding mancala is still quite modest, in this paper, we have also examined the different aspects of this game: the question of its origin, which is linked to the beginning of the Neolithic Age on the territories of Africa and the Near East; the link with the methods of geomantic divination; the anthropological knowledge regarding playing mancala in traditional communities; the distribution and the directions of its diffusion, as well as the archaeological finds in the area Mediterranean.

Key words: mancala, boardgames, the Balkans, the Neolithic Age, Africa, Mediterranean

... Then I set before him somewhat of food and we ate, and I got ready perfumes for fumigating the hall, wherewith he was pleased. Moreover, I made him a mankalah cloth; and we played and ate sweetmeats and we played again and took our pleasure till nightfall, when I rose and lighted the lamps, and set before him somewhat to eat, and sat telling him stories till the hours of darkness were far spent...

The Arabian Nights, The Third Kalandar`s Tale

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1 Sir Richard Burton (1850), translation: http://mfx.dasburo.com/an/a_night_7.html
Fig 1. Mancala board from Belgrade Fortress (foto: S. Pop-Lazić)

Among the finds of great significance that have been excavated during the recent archaeological diggings at the Belgrade Fortress are certainly two boardgames for playing mancala, a social game well-known throughout the world. Mancala, besides chess and backgammon, is one of the most widely spread and oldest social games. What is referred to as mancala is actually a family of games played on a board with rows of cupmarks, and with a complex strategy. In its long lifespan and development, the mancala game has had many aspects, from divination and different symbolic meanings to strategy, winning and capturing, and all of these aspects have been examined more or less in detail throughout time. In the long line of researchers, there are mostly anthropologists, linguists, psychologists, mathematicians.²

Systematic research of boardgames, thereby mancala too, as one of its most significant types, started at the turn of 19th into 20th century, and the pioneers in this field were certainly R. S. Culin and H. J. R. Murray. From the contemporary point of view, there researches were complementary. The

² Information on researchers and basic bibliography see: http://mancala.wikia.com/wiki/Bibliography
American anthropologist Robert Stewart Culin (1858-1929) sought to penetrate into the reasons and processes that lead to the appearance of such similar games in different and far away cultures and parts of the world, such as in America, China, Hawaii, the Philippines and Africa (Culin 1894b). Such an approach can be noticed in his work about mancala (Culin 1894a), which is, even today, one of the inevitable starting-points in the research of boardgames. A bit later, the English mathematician Harold James Ruthven Murray (1868-1955) wrote *A History of Chess* (1913), which served as an introduction into wider research of boardgames. That is how a voluminous work *History of Board Games other than Chess* (1952) was written four decades later. In this capital overview, Murray (1952, 158-159) gave the first mancala classification, based on the number of cupmark rows (Mancala II, Mancala III, Mancala IV), by which he sorted the variants according to geographic regions, and further into groups according to the rules of the game. After the glorious beginnings, an expansion of research occurred in the last several decades of the last century; and interest in the different aspects of mancala continues.

Fig. 2. Mancala board from Belgrade Fortress (foto: S. Pop-Lažić)

Still, our knowledge regarding many questions about this game, predominantly its origin, concerning both region and chronology, is very modest. Therefore,
every archaeological find can mean a step forward in research, and with the re-
examination of the existing knowledge, it can also mean a contribution to a better
and more complete understanding of social games. In that sense, the excavation
of boardgames in Belgrade will be a motive to re-examine some aspects of this
game, together with some earlier conclusions, with the aim of understanding
better the circumstances that led to the distribution of mancala in the Balkans.

Mancala Boardgames from Belgrade

Two mancala boards were unearthed during research in the Lower Town of
the Belgrade Fortress in 2006, in the area adjacent to the complex of the big
gunpowder depot. During previous excavations, remains of Roman objects were
found there, sanctuaries – mitreums and bigger buildings with floor heating,
then one part of a wall dating from 6th century, as well as the foundations of
one late-medieval building. Over these remains were layers of the dikes from
the period of the Turkish-Austrian Rule (17-18th century), which had been
largely formed by filling in this space with earth, during the restoration and
reconstruction of the Upper Town. The boards were found very near each other,
in the layer of grayish-brown loose soil (kota peak elevation 74.29) which,
obviously, would belong to the Early Turkish horizon. On the same level, in the
vicinity, there were parts of a larger pot that could be dated to the 17th century
based on its characteristics.

The mancala boards were made from stone and both had 12 holes- cupmarks
on the upper surface, six in two rows. On one board, which is almost of a right
rectangular shape (length 33cm, width 19-25 cm, density 11 cm), the holes are
round and between them there is a flat surface – a space with intersected
vertical, horizontal and diagonal nicks (fig. 1). The other sides of this cuboid are
unfinished and smooth. The other board is elongated, with irregular edges,
although rectangular in shape (35 cm in length, widest at 17 cm, density 7 cm);
the sides were left unfinished, while the lower side is rough with alternating
shallow hollows and bumps (fig. 2). However, unlike the first board, the
cupmarks on this one are shallower, mainly angular – rectangular or square, and
the rows are separated by one deep sharp nick.

Considering the size and weight, we believe that these boards were placed on
the ground and were not moved often. In fact, for the bigger board in the shape
of a cuboid, it can be assumed that it had been originally built into a public

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3 Archaeological researches carried out by the Archaeological Institute – The
scientific-research project of the Belgrade Fortress, led by Ph.D. Vesna Bikić. Colleague
Ivan Bogdanović recognized the boards and introduced us to the basic rules of the game,
for which we would like to take this opportunity to heartily thank him.
building, probably a hamam. The appearance of the other, smaller board with a rough bottom surface leads us to the opinion that it could have been placed on some kind of short pedestal, and raised from the floor onto a height that was suitable for players sitting cross-legged, in the so-called "Turkish style".

How to Play – The Basics

Contrary to most of the old games, mancala is not a game of luck, but a game of skill, mathematical skill and strategy. A skillful player has a tactic for his first move beforehand; he can predict (calculate) the next two or three moves and, thereby gain a certain advantage over his opponent. A very good description with an illustration of mancala exists in the overview of Oriental games De Ludis Orientalibus, which was published in Oxford by the English Orientalist Ph.D. Thomas Hyde in 1694 (Culin 1894a: 599-600); while detailed explanations of the rules for playing mancala were given by E. Lane in Manners and Customs of the Modern Egyptians (Lane 1908, 351-353). However, on the wider territory where games belonging to the mancala family are played, there are practically countless variations in the manner of playing and in the rules.4 The variations among them depend on the size and shape of board (which can have two, four or eight rows with six to fourteen cupmarks), then of the number of players (one to four), the starting position and number of counters, as well as the manner of moving across the boards (in the clockwise direction or counterclockwise), capturing the opponent’s counters, and the ending of the game.

Fig. 3. Modern mancala board (foto: I. Bogdanović)
Mancala is, basically, a family of games in which two players or two teams of players take part. It is played on the rows of holes hollowed out in the ground or onto wooden or stone boards; the aim of the game is to "capture" all the "counters" by applying complex strategy, or, in some cases, to disable the opponent from making a move. During the entire game, the distribution of counters resembles the act of sowing seeds. The most striking similarity among all the variants of mancala is reflected in the fact that there are no opposing "black" and "white" counters, but the counters are all the same, and what is most easily available from the immediate surroundings is used: pebbles, seeds or shells.

The basic rules of the game are simple, especially for the two-ranked mancala (with 12 cupmarks and 48 counters), in which every player each has 24 counters arranged in six small cupmarks, and one bigger – "store" for storing the counter on the right side (fig. 3). In case the board does not have a "store", the counters are placed on the ground away from the board. The game starts when the first player to make the move takes all the counters from one cupmark from his side of the board and distributes them one by one into every next cupmark, including his store as well (but not into his opponent’s store), until using them all up. If he places his last counter into his store, then it is his turn to play again.
In case he places his last counter into an empty cupmark on his side of the board, the player has to take i.e., "capture" all his opponent’s counters from the cupmark that is exactly opposite, and all the captured counters he then moves to his store. The same principle is repeated in every other move. The game is over when one of the players has no counters left in the cupmarks on his side of the board; then the other player collects all the remaining counters from his cupmarks and moves them to his store; the winner is the player who has more counters in his store.

To win, it is very important to plan in advance all the moves during the game, because the outcome usually depends from the first move, that is, from which cupmark the player will start. If he starts the game by placing his last counter in his store in his very first move, and he has another turn, the player can gain initial advantage. Likewise, by planning his subsequent moves, by adding up the captured counters and by predicting his opponent’s moves, the player creates a strategy that leads him to victory.

Fig. 5: [http://kenyasafaris.wordpress.com/category/people/](http://kenyasafaris.wordpress.com/category/people/) (04.12.2009)
Origin: Time and Place

When I played a game of Bao, board of wood well-decorated
A strong defence I did allow in the center saturated;
Now seeds were sown into a row which in few turns devastated
I said "shurba" when I played it, look at the Bao game I’ve won!

When I played this one mtaji, I played it satisfactor’ly
Until the seeds picked up by me filled up the cup entirely
It swept the board when clear and free, no seeds in store were left to be
I said "Shurba" accordingly, look at the Bao game I’ve won.5

The games from the mancala family are played on a vast territory: in the Sub-Saharan Africa, in the Near East, in Central, South and South-Eastern Asia, in the Caribbean and in both Americas (Townshend 1979, 74). Although in anthropology, the term mancala (from Arabic naqala – to move) has been accepted for all the games of this type, among the members of more traditional communities on such a vast territory they are played under different names. Under the name mancala (mongale) it is played in Syria, Lebanon, Egypt, Upper Congo, along the coast of the Indian Ocean in the area of Mombasa and in parts of Malawi (Driedger 2001; Townshend 1979, 75). In Nigeria, Ghana, and parts of Uganda, it is played under the name wari (owari); in Tanzania, west of the Lake Victoria, in parts of Uganda in the North closer to Sudan, in Western Congo, Malawi and North-Western Kenya, it is known as omweso, mveso and wezo (Driedger 2001; Braunholtz 1931,121), while in the greatest part of Tanzania the game bao (ambao, mbao) is played and the forms of that word appear as far as Malawi (Sanderson 1913) in the South, and Angola in the West (Driedger 2001). Among the different communities in Kenya there are other terms as well: kombe on the island of Lama, where the Arab traders established a port as early as the XIV century; maasi, ankeshui among the Maasai (fig.4); mbothe in the Pokomo tribe, along the river Tana; giuthi among the Kikuyu, and similar to this kiothi in the region of Mer. In Northern Uganda the game is known under the name soro (koro), like awei, in the Dinka tribes in Southern Sudan, ndoto in the Kilenje (Kalenjin) tribes in East Africa, lukho in the Bukuso tribes in Guana (Driedger 2001), kubuguza among the Abatutsi in South-Eastern Ruwanda (Merriam 1953), ohvalhu in the Maldives and katra (katro) on Madagascar (de Voogt 1999, 106,111). In Ethiopia, Eritrea and Sudan, it is played as gobeta (Courlander 1943, 21), and in Zambia, several different names can be heard that are used by different ethnic communities (Chaplin 1956).

In India and on the Philippines, it is played as *chanka* (Dreidger 2001) or *chungcajon* (Culin 1900, 653), while a similar term *conka* (*sunka*) appears in Indonesia (de Voogt 1999, 108). Apart from this term, mancala is played under the name *congklak* in Indonesia and Maleysia. In Sri Lanka, it appears under the name *olinda* (de Voogt 2000, 91) after the olinda seed that is red in color with a red dot, which is used as a counter in the game, but as *Raja Pasu* as well, which means in free translation "the cow king" (de Voogt 2000, 96). In the South-Western part of the province Junan, which is in the southern part

http://www.expat.or.id/info/congklak.html

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*Етноантропологи проблеми н. с. год. 5. св. 1 (2010)*
of the Silk Road, the term *laomuzhuqi* is used (Eagle 1998). In the Caribbean, in the Cape Verde archipelago and in Brazil, as well as on the territory of the Sub-Saharan Africa, it is played as *wari* (De Voogt 2001). To recall, a game called *mangala* that was mentioned in *De Ludis Orientalibus* T. Hydea from 1694, is played under the same name in Turkey today, in South-East Anatolia (And 1979, 52-53). However, in some areas of Anatolia the game is played under different names, such as *altiev* – "six houses", or *evcik* – "small house". Under the name *ban-ban* it is known in Bosnia even today, and as *mandoli* (almonds) in Greece, on the Cyclades islands. For most of the games from Anatolia, as well as for the games from Bosnia and Greece, boards with 12 cupmarks are used (two rows with six cupmarks), so it can be assumed that the basic rules of the game are similar to each other in all of these regions.

From this short overview, it is clear that mancala is very popular on a very wide territory, and the fact that it is widespread exclusively among traditional communities leads to the conclusion that this game is very old. It, however, has not been dealt with in larger ethnological and anthropological researches until now, and the knowledge regarding its origin, the time and place of its origin precisely, is very scarce. Thousands of different variants of mancala are played in Africa, Asia, in the Caribbean and in America. Even though there are smaller or larger differences among them, which have been mentioned earlier, all of them possess several striking similarities. They are mainly reflected in the manner of playing, in which a typical move consists of "sowing", a common term in all the variants of mancala, i.e., distributing the counters from one cupmark to the other; as well as the fact that the player has freedom of choice only at the beginning of his move, because he can choose from which cupmark he will start. Moreover, mancala is also unique because all the counters are totally the same and there are no counters, like in chess for example, which are "in possession"of the players from the beginning of the game. Furthermore, the counters not only serve, like in other games, to move them across the board, but represent a value, which the player needs to win. This inevitably leads to the conclusion that all these games have a common origin. Moreover, it can be said that all the games from the mancala family are descendants of one "ancestral" game (Eagle 2000, 51), which later spread in various directions (Townshend 1979, 794). It seems that the theory of the common origin of all these games from the mancala family is not debatable any longer. Therefore, the question that is much harder to answer: where and when was this "ancestral" game played?

The questions of the place and time of origin and manner of diffusion of mancala, except for the case of American mancala, is not completely clear. Mancala was mentioned for the first time in historical sources from 10th century, in the writings of the Arab scientist Abu’l Faradj-a (897-967) (Binsbergen 1997). In addition, mancala is quite widespread in the areas that
were under the influence of Arabs and Islamic trade, in Africa as well as in the South and South-Eastern Asia. That has led many earlier authors to seek for the origin of mancala in the region of the Arabian Peninsula (e.g. Culin 1894a, 597; Joyce 1928, 26), and to acknowledge that mancala, although it had originated from that region spread throughout Africa very quickly and there became a "national" game. Yet H. Murray, the pioneer in the research of social games, had given arguments against the "Arab"origin of mancala: it is the only game that is played on the African continent outside the zone of Arab and European influence (cf. Binsbergen 1996-1997, 232), firstly by considering the absence of mancala in North Africa (Binsbergen 1997) and thereby, assuming that mancala is native to Africa. Later, Townshend also supports such an "Afro-centric" view, stating that Ethiopia was the cradle of mancala, even though he was aware of the possibility of African-Arab diffusion (Townshend 1979, 794). This opinion has not been completely accepted, and as a counter argument, among other things, it is stated that mancala was played outside of Africa as well, for example in prehistoric India (Binsbergen 1996-1997, 234).

The question of the time of origin of mancala seems to be a little clearer. The earlier origin of mancala is linked to Ancient Egypt, i.e., with the excavations of two-ranked boards in Mikerin’s pyramid, the temples of Luxor and at the entrance into the Ptolomei temple in Carnaca. However, it is certain that many of the boards are much younger than the buildings in which they were found, so that thesis was rejected (Schädler 1998: 20). Today, there is agreement that the origin of mancala dates back to the Neolithic Age, of which are proof the rare archaeological finds (see further in the text), as well as the symbolism related to playing mancala and its link to some bans and taboos that have survived until the present day.

**Mancala and Divination**

In analyzing the origin of mancala, an important topic, apart from the time and place of its origin, is its connection and similarity to methods of divination – geomancy. Divination implies two key factors: unpredictability and chance. Playing mancala includes both of these elements: an element of chance is reflected in the fact that the player does not have any influence on the distribution of the counters, except when choosing the cupmark for the initial move and choosing the direction for the act of "sowing"; and the element of unpredictability is reflected in the inability to precisely predict the appearance of the entire board after the counters are redistributed by the end of the move. This indicates that the forerunner of "ancestral"mancala were activities related to divination, which had been carried out in the same manner (Eagle 2000, 52).
Divination can be performed by striking the sand with a stick – in Arab *khatt al-raml*, which literally means "art of drawing lines in sand" (Binsbergen 1997), or *darb al-raml* – striking the sand with a stick so that a random number of holes could be produced (Binsbergen 1996-1997, 226). Regardless of how the divination is performed, the consequence is the rows of figures (usually four) of which each consists of one or two dots; there are 16 combinations. Their reading is performed according to some memorized or written key (Binsbergen 1997; Binsbergen 1996-1997, 229).

The characteristic move in mancala implies the act of "sowing" the counters from one cupmark onto another and emptying the cupmark which is opposite to the one in which the sowing ends. This kind of elimination is typical of geomancy. Usually, it begins with many elements (pebbles, seeds, etc.) distributed randomly, after which the procedure of elimination starts, which reduces the amount of elements to one or two, so the quantity can be counted as even or uneven, i.e., 1 or 2 dots in four rows, which make a geomantic figure (Binsbergen 1997; Eglash 1997, 115). This link between mancala and geomancy is especially evident in Zambia, where mancala is played with mungongo seeds, which are also used for geomantic divination.

In geomancy, there is always a link with the cult of earth. Geomantic symbolism is much layered: there is the maternal, agricultural symbolism of the impenetrable and elusive, incomprehensible earth as the source of life; but there is also the symbolism of tangible earth, dust, pebbles as the humble origins of man and life in general (Binsbergen 1996-1997, 228). In the "art of drawing lines in the sand", the "reader" (diviner) actually evokes several transformations of space through which the surroundings are transformed into a piece of cultivated land: by confining (setting the boundaries), clearing away trees, ploughing land, irrigation and harvesting (Binsbergen 1996-1997, 226).

**Origin: Neolithic Age**

It has already been mentioned that the origin of mancala is chronologically linked to the Neolithic Age, as a period in which agriculture and animal husbandry began. Having become aware of the natural processes around him, mainly the alternating natural cycles, Man then began to transform the natural surroundings according to his needs, by clearing away forests, so that he could provide arable land on one side, and by cultivating this land on the other. As the result of such a new relationship towards the world, permanent settlements and a sedentary lifestyle were formed, and thereby, probably, the formation of more complex social organizations. Archaeological facts regarding the existence of mancala in the Neolithic Age are very rare. The most famous find from the Neolithic Age that can be linked to mancala is a stone board made of...
limestone with two rows and six cupmarks, which was found under the flooring of one Pre-pottery Neolithic house C from Ain Gazula (Rollefson 1992). Two whole boards and one fragmented were found in Beidhi as well, and one board was found in the Neolithic layer of the location Chagha Sefid in West Iran (cf. Rollefson 1992). On the other hand, one stone board with two rows of cupmarks was found even in Kenya, where the domestication of animals had been preceded by the cultivation of plants, and it belongs to the period of "pastoral" Neolithic Age (2500 – 500 p. n. e.) (Ryan and Karega-Munene 2005).

If we take into consideration the fact that boards were probably not used in the earliest period, but that the game was played with the cupmarks hollowed out in the ground, it certainly cannot be expected to find such "boards" in archaeological records, regardless of how detailed were the excavations. Even if wooden boards had been used, it is very unlikely that they would have been preserved until the time of excavation. Likewise, the counters for playing, seeds and stones are the usual finds among the archaeological materials, and cannot be linked with definite certainty to the context of boardgames. On the other hand, the main condition for the existence of a boardgame is also the existence of some determined set of rules, in whose identification archaeology is completely powerless. Therefore, are there any other data that could prove the Neolithic origin of mancala?

Herein, we must turn to the data that have enabled ethnological and anthropological researches. It has been confirmed that in many traditional communities, any individual at their free will, and whenever they wish cannot play mancala. Playing mancala is often limited not only by sex, age and status, but by space and time.

Mancala is, mainly, a game of adult men: this has been confirmed, among other places, in Uganda, in the Maasai and Bukusó tribes (Driedger 2001). Women were mainly left out of the games. The reason for this was, probably, for protecting the prestige of men, because if a woman or child publicly beat a man in a game, it would have been considered as a great embarrassment. It was forbidden to uninitiated boys, and children were generally dissuaded from playing, because that would have brought misfortune to the village. (Popova 1976, 440). Mancala was played during the period of the initiation of boys, and then it had an educational role, symbolically admonishing the social values that needed to be respected. (Townshend 1979, 74). In some communities, like in the case of the Kikuyu, boys were allowed to play mancala, but only while looking after the goats (Driedger 2001). In Asia, the situation was somewhat different: women mainly played in India (Claus 1987), in the Maldives some variations of mancala were played only by women and children, in the house only (de Voogt 1999, 108), and on Java solely young girls, members of nobility and mancala is considered exclusively...
to be a women’s game. This distinction in relation to the situation in Africa is explained by the fact that mancala arrived in those parts somewhat later, when playing mancala had lost its symbolic meaning, thanks to Arab traders who first established contact with the local nobility. The symbolic meaning is lost even in the native land of mancala, so women now play it too.

Mancala is played during the day, because the night is reserved for the activities of the spirits, ancestors and divinities. If someone played it at night, it is believed that he would become ill or mad, or even die, and that the spirits would take his soul. However, if the game is linked to some ritual, for example, a burial, playing mancala at night is allowed; then it is not played for entertainment, but to deter and appease the ghosts of the deceased and other evil spirits (Popova 1976, 440).

Mancala is usually linked to different festivities, ceremonies and rituals. The future chief is often chosen by playing mancala. So, in the Ganda tribe on the north and west coasts of Victoria Lake, choosing the kabake, i.e. the king, was performed by playing a game of mancala. The candidate had to play a game with seeds, which he had picked from a specific tree, so his co-players would not outwit him (Townshend 1979, 74). Chaplin reports on a conflict between two chiefs in Zambia, which was resolved by playing mancala (Chaplin 1956, 168). Among other things, this shows that knowing how to play mancala is equal to being competent in another field and is an achievement in the acceptable social norms, which inevitably leads to the belief that the winner is somehow in favor of the gods or ancestors (Townshend 1979, 74).

The best opportunities for playing mancala are funerals, weddings, during isolation that precedes the initiation of boys, the girls’ first menstrual cycle (Townshend 1979, 75), and what should be especially emphasized is its link with funeral customs. In Indonesia, playing mancala is considered to be a taboo in all occasions except during the period of mourning, after the death of a beloved, during the wake and the ceremonies related to burials in Dutch Guiana (Binsbergen 1997) etc.

Mancala is also played in order to invoke rain or stimulate the growth of vegetation: that is why the best time for playing it is during a drought; and during the rainy season, it is forbidden to use seeds as counters (Popova 1976, 440). The Kanakura tribe from North Nigeria plays games with cupmarks in the sand during annual celebrations related to the end of a millet harvest, in September or October (Binsbergen 1997). In Sri Lanka, it is played during Ramadan and for New Year’s (de Voogt 2000, 94), and in India in the period between the sowing and harvesting of rice (Claus 1987).

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7 http://www.expat.or.id/info/congklak.html
8 http://www.expat.or.id/info/congklak.html
Mancala is not a game that is played indoors; it is played in a public place, in the village, in a man’s house, or in the fields and meadows. However, if the game is connected to ritual ceremonies, like choosing a chief, or during the collective isolation of boys and girls at the time of initiation, then it is played in a confined space. (Popova 1976, 440).

The closeness of games from the mancala family with the ceremonies and rituals related to invoking rain, celebrating a harvest, funeral customs, as well as to marking the important moments in the lives of girls and boys during the period of their initiation, when they are preparing to enter into adulthood and take an active role in community life and its reproduction, undoubtedly, shows the strong symbolic character of this game. Moreover, mancala represents a formalized semiotic system (Popova 1976, 433). In the center of this system, like in geomancy is the earth. The grid-like pattern, typical of geomantic divination as well as of mancala, undoubtedly, resembles parcelled out fields, ploughed land. Moreover, in the earliest forms of Sumeric, Egyptian and Chinese letters this grid-like symbol meant "field", "ploughed land" (Binsbergen 1996-1997, 224). The mancala board always stresses the unity of opposites: the West is the place of the dead, so the board in some places is turned in the direction I-Z; the left is the female, and the right is the male side (Popova 1976, 444). The distribution of counters across the board, demonstrates, therefore, the alternations of life cycles – birth, dying and rebirth. The mancala symbolism is not only reflected in the appearance of the board and the figures that are produced by the redistribution of counters on it. Its most striking feature is, without exception, that in all its variants throughout its area of diffusion, one move is called "sowing". The name of the game, even though it originates from the terms meaning board or seeds that are used in the game, there are other meanings as well: wallatech, which is translated as "to be born", or wari - "to copulate, to marry" (Popova 1976, 443). The cupmarks on the board or hollowed out in the ground are called "houses" (Culin 1894a, 597), fields (e.g. Dreidger 2001) or pens (i.e.). In pastoral communities, terms that refer to domestic animals typically appeared, so the counters were rather often called "cow" (Dreidger 2001; Marriam 1953, 170), "pig" (Eagle 1998), sometimes even "child" (Townshend 1979, 75), while a cupmark with four counters is called "bull" (Dreidger 2001). Capturing the stones is usually referred to as "swallowing", "grabbing a cow", "securing a bride", "giving birth to a daughter", and when losing a game - "dying" (Townshend 1979, 75). The symbolism of numbers also has a significant place in playing mancala: for example, number 48 is a holy number, which denotes the key of the world, and mancala is often played with 48 counters (Popova 1976, 454).

The symbolism of mancala, therefore, can be followed at several levels, in which the unity of opposites is always emphasized: male-female, left-right,
even-uneven, day-night, rainy-dry, birth-dying, and finally, life-death. Dualism, which is reflected in constantly opposed, but inseparable principles of life and death that represent an unbreakable unity, presents a reflection of the view of the world in which the central place have the alternating life cycles. In the Neolithic Age, Man stopped to be just a passive observer of the Nature around him, but he started changing it in accordance with his own needs, firstly by cultivating plants and domesticating animals. Seasonality, of which even the Paleolithic hunter-gatherer was undoubtedly aware, became very important in the Neolithic Age. Because by paying attention to the changes of annual cycles, the farmer was able to plan the preparation of land and perform sowing and harvesting in the periods when they would be the most productive, and the stockbreeder was successful in breeding animals as well. For the successful performance of farming activities and animal husbandry, some form of social organization had to be created, with a determined system of rules and values. Playing mancala, with clearly established rules could have been the constructive element that helped in the cohesion of the agricultural and stockbreeding community and symbolically represented its values and views of the world.

If we accept that mancala was created in the Neolithic Age, one more question remains that still needs to be answered and that is the place of its origin. The oldest cultivation and domestication are surely known to have taken place in the fertile Half-Moon region, but it is questionable whether mancala originated from this area. It is a fact that the process of neolithization took place in Africa as well. Although it is believed that some sorts of plants originated from the area of Levant, it is without question that independent cultivation of certain plant species occurred in North-Western Africa, like yams, African rice, some sorts of legumes, sorghum, some sorts of millet, all originating from the Sub-Saharan areas, as well as Ethiopian plants enset and noog. (Harlan 1971, 470-471, 196; 1969; Phillipson 2005, 167). The role of grains in food consumption in this area in the period of the Neolithic Age had been probably over-estimated, and the independent cultivation of local sorts was more important than introducing cultivated plants from other regions (Phillipson 2005, 171). That is why it can be considered that the process of domestication, i.e., the Neolithic Revolution in this area developed independently and that the Neolithic "package" is indigenous. The fact that the survival strategy in the period of the Neolithic Age on the territory of Central, East and South Africa was not based on agriculture, but on animal husbandry is why the Neolithic Age of this region was often called "Pastoral Neolith" (e.g. Smith 1992). Even today, animal husbandry is principal in these regions, and often the only agricultural activity. The question of the origin of domesticated species in Africa has also been the topic of many discussions. Although, it has been confirmed that the origin of ovicaprids should be sought
outside the African continent, it has been confirmed that there were two centers of domestication of livestock, of which one is in North Africa, from where their breeding spread throughout the continent (Phillipson 2005, 168). It is certain that on the territory of Sub-Saharan Africa indigenous species were bred – the bovine and the donkey, while other animal species were imported. Different economics have resonated even in playing mancala. If we accept the fact that mancala reflects the values of Neolithic communities, spiritual, social as well as material, it is not surprising that the counters are called cows or bulls in pastoral communities, and the cupmarks pens for livestock, while in agricultural communities the cupmarks are called fields, ploughed land or houses. When the player loses all his counters, it is, therefore, not surprising that he symbolically "dies", because without the greatest values, the ploughed land or domestic animals, there was no life left.

Regardless of the fact that the process of neolithization took place in Africa somewhat later than in the areas of South-Eastern Asia and Europe, it seems that for analyzing the origin of mancala the beginning of a Neolithic Revolution was not of crucial importance, even though it is certain that its origin lies in Neolith, and, presumably, in it earliest phases. Therefore, some authors suggest that the territory of Africa and West Asia both can be observed as an entity, because the Neolithic processes that had led to the appearance of mancala sometimes had occurred independently of each other, on both continents (Binsbergen 1996-1997, 235, fig. 4).

Distribution: Directions of Spreading of Mancala

Even though the anthropological studies until the present have not put great emphasis on the origin and symbolic aspects of playing mancala, the analysis of its distribution was often a means of establishing the migratory routes. The stability of rules can be explained only by the fact that the game was brought to the other areas by routes taken by large groups of players. By further analysis of the trade and migratory routes, it is possible to explain why there are so many variations in playing, as well as where and when the changes took place (de Voogt 1999, 109). The similarity is striking regarding the geographic distribution of geomancy and mancala, which represents

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9 It should be stressed that Neolith in these areas was younger than Neolith in the Near East and in South-Eastern Europe. Considering the fact that the debate regarding the origin and chronology of Neolith on the territory of Africa goes beyond the boundaries of this paper, herein, we have only accentuated these aspects that could have influenced the appearance of mancala. For more details on Neolith in Africa see: Phillipson 2005.
further proof of their common origin (Binsbergen 1996-1997). If the wider region of North-Western Africa and West Asia can be seen as the birthplace of mancala, a significant role in its diffusion had, undoubtedly, the bearers of Islam, who had spread it to South and South-Eastern Asia.

It seems that the distribution of mancala in the later period denotes the boundaries of Muslim culture (fig. 5) and the custom of playing mancala was adopted firstly in the Arab peninsula and in Egypt (Murray 1952, 158-159). When the circumstances of diffusion and the distributors of mancala are in question, it is necessary to recall that the games of luck are prohibited to Muslims that is why they were not mentioned in the Qur’an. However, mancala could have been familiar to Arabs in the Middle Ages, considering the fact that a similar game was mentioned in the "Book of Poems" (Kitab al-Aghani), an encyclopedic collection of poems and songs gathered by an Arabian scientist Abu al-Faraj al-Isfahani (897-967) (Culin 1894a, 599). In addition, the oldest concrete written recording of the game was in the collection of stories One Thousand and One Nights "... I made him a mankalah cloth; and we played..."10

Based on these data, it may be assumed that mancala – a game of destiny and calculation, sowing and capturing – was interesting and perhaps tolerated, in which case it could reasonably be assumed that the diffusion of mancala could have been aided by pilgrim routes around the Islamic world (Culin 1894a, 604-605).

With the beginning of slave trade, which began after the world maritime revolution in 15th and 16th century, and intensified by mid-18th century from the region of West Africa (Kurten, Fireman, Thompson, Waisina 2005, 273-319), large groups of African slaves brought with them the mancala game to the New World. Unlike mancala that is played in Asia, mancala among the black slaves maintained its symbolism and taboos that it had had "at home": solely men played it; it was played exclusively at night; during the period of mourning to appease the spirits of the deceased (Herskovits 1932, 34-35).

Archaeological finds from several locations in the USA confirm the playing of mancala in the northern parts as well. An interesting confirmation of playing mancala was found in New Philadelphia, a town from 19th century in present Illinois. The counters for mancala were found in the form of small, triangular or rectangular shards of pottery and glass. The counters for mancala were found in the houses of the white population, as well as the black, which confirms the barter between the two groups, and common life in the period when racial segregation was present in most parts of the United States of

America (King 2008, 8-9). The finds of the pottery and glass shards, which are used secondarily as counters for mancala, are typical finds in the settlements in North Africa and in the Caribbean, which belonged to slaves brought from West Africa. Such a choice of materials for counters is quite unusual in the native lands of mancala. Considering the fact that slaves were surrounded by products of colonial, western-European culture, and they had not brought almost anything with them from Africa, it is clear that they used those products in a different manner by adopting them to the customs of their homelands. That was why fragments of English pottery of 18th century were further shaped and polished to serve as counters for playing mancala. They were found in Poplar Forest, on Thomas Jefferson’s land, on locations in Virginia and Jamaica (Samford 1996, 104).

In the context of a diversified maritime trade, the appearance of mancala in the North of Europe should certainly be observed in this same period, in 17th century – it was played by English tradesmen, and it was very popular among aristocracy in the Baltic provinces of the Russian Empire termed *Bohnenspiel* – the bean game.¹¹

**Archaeological Finds in the Region of the Mediterranean**

The chronology of mancala in historical periods still represents a great unknown, mainly due to the relatively small number of archaeological finds and their unclear datation. In most cases, those were boards that appeared in the form of rows of hollows in the curbsides or paved surfaces of squares, temples or other public buildings. The Nabataean cities are well-known for the number and variety of such boards, above all Petra (Jordan), where there are panels in many public surfaces, in front of luxury houses, close to theaters, in front of monasteries and elsewhere.¹² Apart from the earlier mentioned Egyptian temples, similar examples exist in some Roman cities in Asia Minor, ex., in Aphrodisias, Miletus, Ephesus and ancient Iznik. For these examples, a very broad period of datation was suggested, from 2nd century, when the buildings were constructed, to 6th century the period of their reconstruction and renewal, i.e., up to the Arabian invasion during 7-8th century (Schädler 1998, 11, 14, Figs. 1-4).

To our knowledge, the greatest number of boards that had been carved into stone so far were discovered during the archaeological researches of the sites Abu Sha’ar, on the coast of the Red Sea in Egypt. 10 mancala boards together with 10 other boards for other social games were found in several spots in this

complex, of which one is marked as an "arcade" (Mulvin & Sidebotham 2004, 604-608, 614). The chronology of these finds corresponds with the period of living in the fortress – from 4th to 6/7th century. In addition, they have reinitiated the unresolved questions regarding the diffusion of mancala in the areas of the East Mediterranean, primarily which culture should be merited for this, the early Byzantine (early Christian) or Arabian (Islamic) (Schädler 1998, 20). In this sense, the appearance of mancala boards in Ancient Egyptian temples should be re-examined, of which there was mention earlier, and for which it is supposed that they date from the period of Arabian conquests.

The finds of mancala boards are known on the territory of the West Mediterranean, and most of them date from 10-11th century. In the Museo de Burgos (Spain), a board is kept which belonged to the daughter of Abd-al-Rahmana III (891-961), Emir and first Caliph of Cordoba.13 This board is in the form of a case that can be unfolded (approximately 50 cm long), made of ivory and metal, probably bronze, and it has 10 cupmarks, in two rows of five. According to the same source, at least 13 boards were found at the site in Ciudad de Vascos (Navalmoralejo, Toledo), and in the very town of Toledo, at the Puerta del Cambrón – gate at the entrance into the Jewish quarter, a stone block was noticed with engraved cupmarks for mancala. This board is now in an upright position, so it is assumed that it was put in as a spolia, most probably during the reconstruction of this gate in 16th century.

Balkan Files

To our knowledge, the boards from Belgrade are the only archaeological finds of mancala on the Balkans. Apart from their stratigraphic context, their datation to the period of Ottoman rule corresponds to the time of the written recordings by the Frenchman Poullet about the game he had seen in the central Balkans around 17th century (Jelavić 1908, 42-43)14: "A few of them

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14 "Quelqués-uns d`eux sçauent les échets ; mais le jen auquel ils passent le plus ordinairement le temps, se fait dans vne petite boetté ployante, longue presque d`vn pied, & large d`vn quart. Dans l`étendue de sa longueur il y a cinq ou six trous de chaque costé, de pareille grandeur que les fossettes ansquelles les enfans jouent à la balle en France. Ils mettent vn certain nombre de féues blanches & noires dans chacun de ces trous. Le premier qui commence, vuide le premier, & distribüe ce qu`il y a pris dans les suiuans. Le second fait de mesme, & poursuisien de la sorte insqu`au rencontre de quelques nombres impairs; auquel, celuy en faueur duquel il tombe, prend toutes celles qui sont en cet endroit, & continuent iusques à ce qu`vn d`eux ait gagné toutes ces féues".

Еtnоантропологически проблеми н.с. год.5. сб.1 (2010)
were familiar with the game of chess, but a game they commonly play is
played on a small box that can be unfolded, and is almost one foot long and a
quarter of a foot wide. Along that box, there are five or six holes on each side
as big as cupmarks, which can be seen in children’s ball games in France.
They put a certain number of white and black berries\(^{15}\) in each of these holes.
The person who begins the game takes out the pieces from the first hole and
then redistributes that into the subsequent holes. The second player does the
same and the game continues in the same manner until there are several
numbers that fall into the cupmark with the uneven number of berries, and the
player whose gain that is, takes all the berries. The game continues there,
until one of the players wins all the berries". This description surely referred
to a public place, primarily tea houses and coffee houses, but mancala was
also played in private homes, which was illustrated by the Swiss miniaturist
Jean-Etienne Liotarda (1702-1789) "Deux dames grecques ou franques assises
sur un divan et jouant au mankala'h" (fig.6) (Culin 1894a, 597).

In the second half of 18th and during 19th century on the Cyclades Islands,
the local variant of mancala \textit{mandoli} (almonds) was played, on a standard
mancala board with two rows with six cupmarks and one bigger on each side.
John Galt, a Scottish writer, who travelled all over Europe at the beginning of
19th century, having lingered especially on Sicily, Malta and the Greek Isles,
gave a descriptive testament. On one of the islands, a game that the locals
played in the coffee houses was especially interesting to him (Galt 1813, 241-
242): "The Idriots have no places of public recreation... There is, however, a
tolerably decent coffee-house; and in winter, even at present, card and chess
players may be always found in it. I saw there to-day a game, which, not having
seen elsewhere, I will give you a description. The Idriots call it Mandoli, or the
Almonds, and it is played at a board by two persons. Twelve hollows are
scooped in the board, in two rows of six each: in each hollow six balls are
placed and the opponents take each a row. The game is commenced by the first
player taking out of the balls from any one of the hollows, and distributing
them, one by one, successively, round the board. In the first round, no balls can
be captured, but in the second, the contest becomes serious. The skill of the
player consists in so managing his distribution, that his last ball shall either fall
into a hollow where is only one, or three, or seven, or nine &c. which, by the
addition of his ball, are made even numbers, and in the distribution he makes
even numbers in the two last hollows, he takes the contents of both. This is, of
course, he who reckons the greatest number of prisoners."

Judging by all the available data, it seems that mancala did not gain greater
popularity only in Europe. Likewise, there are no reliable data proving that it

\(^{15}\) The color of seeds does not signify the belonging of the seeds to one or the other
player, but every cupmark contains an equal amount of seeds in both colors.
was known before 17th century. Similar can be concluded also for the area of Central Balkans. There is archaeological proof that mancala was played in Belgrade, while from the information of travelers it can be learned that it was known in Bosnia and Herzegovina during the same period. In addition, it is rational to assume that it could have been played on the territory of Bulgaria as well, which had similar political and social circumstances, although for this there is still no reliable proof. Given that the boards were found in the area of the fortress, it is certain that mancala was played by the Ottoman soldiers or the people who accompanied them, and similar can be assumed for the other regions of the Balkans which were in that period also in the Ottoman Empire. Therefore, it can be concluded that the custom of playing mancala on the Balkans is directly linked to the Ottoman conquests and that the rules of the game were adopted from Anatolia. Likewise, it seems quite certain that mancala on the territory of Europe had no symbolic meaning, and it was only played for entertainment, of which proof are the places and circumstances in which the previously mentioned boards were found from the early Byzantine fortress in Abu Sha’aru in Egypt, as well as the most recent from a significantly later period, the Belgrade finds. However, one of the Belgrade finds on which different nicks can be noticed causes certain doubts regarding this issue. In addition to the crossed and vertical lines, the grid-like sample, which resembles a model of a field with two rows with five cupmarks or four rows with five, attracts special attention. For now, it remains unclear whether it has any relation to mancala and whether it had any function whatsoever, or perhaps it is a copy of some previously seen proposal, which can be a vague reminiscence of some earlier meaning of mancala. Alternatively, in the grid-like sample one can perhaps recognize a schematic depiction of mancala, which served as an explanation of some of the rules of the game.

Due to its longevity, complex symbolism and multiple meanings, as well as a wide distribution, mancala represents a very inspirational field of research, in which Balkan archaeology should have a notable place. Therefore, we hope that the study of mancala, and boardgames in general, in the future will increase, and thereby offer answers to unresolved questions, and confirm or invalidate some of the conclusions given in this paper.

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Vesna Bikić i Jasna Vuković

Ponovno razmatranje igara na ploči – mankala na Balkanu

Povodom dve tabele za mankalu – nalaza iz Donjeg grada Beogradske tvrđave, u tekstu se razmatraju pojedini aspekti ove igre, kao i neki raniji zaključci, u cilju boljeg razumevanja okolnosti koje su dovele do distribucije mankal na Balkanu. Porodica igara kojoj pripada mankala, odlikuje se igranjem na ploči sa nizovima jamiča uz primenu složene strategije. U dugom trajanju i razvoju igranje mankal imalo je mnoge aspekte, od proricanja i različitih simboličkih značenja do strategije, i svi su tokom vremena razmatrani, manje ili više detaljno. Mankala je veoma popularna na širokom arealu (Afrika, zapadna i jugoistočna Azija, obe Amerike), a činjenica da je raširena isključivo među tradicionalnim zajednicama upućuje na zaključak da je ova igra veoma stara. Poreklo mankal dovodi se u vezu sa počecima neolita na prostoru Afrike i Plodnog polumeseca. Ukoliko se široka oblast severozapadne Afrike i zapadne Azije uzme kao matična oblast nastanka mankal, značajnu ulogu u njenom širenju odigrali su nesumnjivo nosioći islama, koji su se preneli u južnu i jugoistočnu Aziju. Čini se da distribucija mankal u kasnijem periodu označava granice muslimanske kulture i da se običaj igranja mankal najpre odomaci na Arabijskom poluostrov i u Egiptu. Sa početkom trgovine robljem iz oblasti zapadne Afrike velike grupe afričkih robova sa sobom u Novi svet donose i igranje mankal.

U analizi porekla mankal je važna tema je, osim vremena i mesta nastanka, njena veza i sličnost sa metodama proricanja – geomantije. Veza igara iz porodice mankal sa ceremonijama i ritualima koji su u vezi sa prizivanjem kiše, slavljenjem žetve, posmrtnim običajima, kao i važnim trenucima u životima devojčica i dečaka u periodu inicijacije, nesumnjivo pokazuju jak simbolički karakter ove igre. Igranje mankal, sa jasno utvrđenim setom pravila moglo bi biti onaj konstruktivni element koji pomaže u koheziji zemljoradničko – stočarske zajednice i simbolično prikazuje njene vrednosti i poglede na svet.

**Ključne reči:** mankala, igre na ploči, Balkan, neolit, Afrika, Mediteran

Vesna Bikić et Jasna Vuković

Réexamen des jeux sur tablier – mankala dans les Balkans

À propos de deux tabliers pour le mankala – vestiges retrouvés dans la Ville basse de la forteresse de Belgrade, dans le texte sont étudiés certains aspects de ce jeu, ainsi que certaines conclusions antérieures, afin de mieux...
mettre en lumière les circonstances qui ont mené à la diffusion de mankala dans les Balkans. La famille des jeux à laquelle appartient le mankala, se caractérise par le jeu sur un tablier ou un plateau sur lequel sont disposées des rangées de cases et par l’application d’une stratégie complexe. Au cours de son long développement, le jeu de mankala a revêtu différentes significations: divination, significations symboliques diverses, stratégie; elles ont toutes été étudiées, plus ou moins en détail. Le mankala est très populaire sur une zone étendue (Afrique, Asie occidentale et celle Sud-Est, les deux Amériques), et le fait qu’il soit répandu exclusivement dans les communautés traditionnelles renvoie à la conclusion que ce jeu est très ancien. L’origine du mankala est mis en rapport avec les débuts du néolithique sur les territoires de l’Afrique et du Croissant fertile. Si l’on considère les vastes régions de l’Afrique du Nord-Ouest et de l’Asie occidentale comme les régions originaires du mankala, ce sont alors les représentants de l’islam qui ont indéniablement joué un rôle de premier ordre dans sa diffusion, et qu’ils l’ont transféré en Asie du Sud et du Sud-Est. Il semble que la diffusion ultérieure du mankala marque les frontières de la culture musulmane et que la pratique du mankala s’est d’abord répandue sur la péninsule arabique et en Égypte. Dès les débuts de la traite d’esclaves provenant de la région d’Afrique occidentale, de grands groupes d’esclaves africains transportent le jeu de mankala au Nouveau Monde.

Dans l’analyse de l’origine du mankala une des questions importantes, le temps et le lieu de sa création mis à part, est celle de sa relation et de sa ressemblance avec les méthodes de divination – la géomancie. Le rapport des jeux appartenant à la famille du jeu de mankala avec les cérémonies et les rituels en relation avec les tentatives de provoquer la pluie, la célébration de la moisson, les coutumes funéraires, ainsi qu’avec des moments importants dans la vie des filles et des garçons dans la période d’initiation, révèlent incontenstablement un fort caractère symbolique de ce jeu. Le jeu de mankala, avec son lot de règles établi avec précision pourrait être cet élément constructif qui contribue à la cohésion de la communauté agricole et qui représente symboliquement ses valeurs et ses vues sur le monde.

Les vestiges des tabliers archéologiques pour le mankala sont originaires de la région de la Méditerranée et sont datés largement, du II au VIII siècle dans les régions orientales et du X au XI siècle dans l’ouest. Il semble qu’en Europe le mankala n’ait pas jouï d’une grande popularité avant le XVII siècle. Les récits des voyageurs nous apprennent qu’à cette époque-là il était connu en Bosnie-Herzégovine. En outre, il est raisonnable de supposer qu’il a pu être joué sur le territoire de la Bulgarie actuelle, qui se trouvait dans des circonstances politiques et sociales assez semblables bien que les preuves irrécusables n’aient pas encore été trouvées. Les tabliers de Belgrade sont les seuls vestiges archéologiques du mankala dans les Balkans. Étant donné que les tabliers ont été trouvés sur l’emplacement de la forteresse, il est certain
que le mankala avait été joué par des soldats ottomans ou les gens de leur suite, et il est possible de faire des suppositions similaires pour les autres régions dans les Balkans qui à l’époque se trouvaient aussi dans le cadre de l’empire ottoman. Par conséquent, il est possible de conclure que la pratique du jeu de mankala dans les Balkans est en relation directe avec les conquêtes ottomanes et que les règles du jeu ont été empruntées à l’Anadolie.

*Mots-clés:* Le mankala, Afrique, les Balkans, la forteresse de Belgrade, néolithique