THE MORPHOLOGY OF HALAFIAN PAINTED POTTERY FROM YARIM TEPE II, AND THE PROCESS OF UBAIDIAN ACCULTURATION

Shahmardan Amirov*

La descripción formal de las cerámicas pintadas Halaf de Yarim Tepe II permite aproximarnos a los conjuntos cerámicos de Neolítico final del Próximo Oriente. Si bien la aparición de un nuevo grupo morfológico exógeno asociado a la tradición cerámica Ubaid afectó a la tradicional producción Halaf. Este proceso fue básico para entender la naturaleza del fenómeno de aculturación Halaf – Ubaid.

Cerámica a mano Halaf, Variedad formal, Tecnología de la rotación, Halaf-Ubaid, Aculturación Halaf-Ubaid.

The formalized description of the Halaf painted pottery at Yarim Tepe II allows us to approach Late pottery assemblages from Middle East. The appearance of a new exogenous morphological and technological group related to an Ubaid pottery tradition' affected the Halafian pottery tradition is a core fact to understand the nature of the process of the Halaf-Ubaidian acculturation.

Halaf handmade pottery, Stable Variety of Shapes, Pottery rotating technology, Halaf-Ubaidian acculturation.

INTRODUCTION

Yarim Tepe II is a Halafian site that was excavated by a Russian team in 1969-1976, directed by R. Munchaev. The settlement is located in the Sinjar region of Iraq, in a valley about 7 km south-east of the Sinjar mountain range. This is the isohyet region of traditional dry-farming agriculture with a modern annual rainfall between 300-250 mm. (Fig. 1).

The Yarim Tepe II settlement presents a Tell with approximately 7m of cultural deposits. Almost half of the site was destroyed by spring water flows. It is important to note that, immediately adjacent to Yarim II, the bigger tell of Yarim Tepe III also had contemporary Halaf cultural deposits. (Fig. 2).

Therefore, two tells could present an extraordinary single halafian settlement with a kind of complicate two core social organization.

The uppermost part of Yarim Tepe II is damaged, to a depth of one meter from the surface, by erosion and burial activity from some historical periods. The site was excavated to the virgin soil over 500m². The cultural deposits of Yarim Tepe II were divided by excavators into nine general levels (or building horizons).

YARIM TEPE II ASSEMBLAGE

The main object of our analysis was the study of the morphology of mass painted pottery from Yarim Tepe II. Painted ceramics comprise approximately 24% of all pottery unearthed on the site. Among other ceramic groups, coarse cooking vessels (10%), thick-walled storage vessels (15%), and thin-walled non-painted pottery (51%) should be noted. The painted pottery collection from Yarim Tepe II excavations amounts to approximately 25000 fragments. Among these, about

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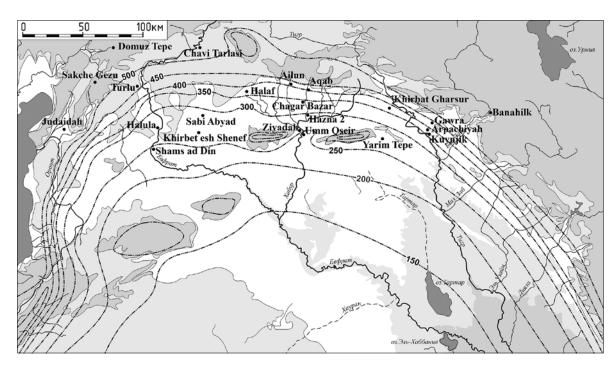


Figure 1. Map of the main Halafian sites distribution and modern precipitation in North Mesopotamia.

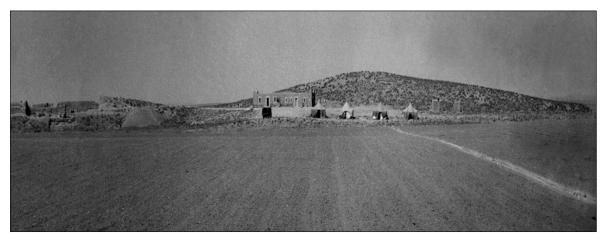


Figure 2. View of Yarim-Tepe group from the East. Yarim-Tepe II is the left one.

7000 are morphologically valid. Because of the great quantity of material in the collection it was decided to limit analysis to a representative set of samples. For this, all morphologically valid sherds from one square close to the top part of the tell (square n.28) were studied throughout the entire sequence of cultural deposits. Sampling was carried out for a 100m² area to a depth of 6.80 m, producing 1004 usable pottery fragments.

The point of departure for the formalized description of the collection of Halafian painted pottery was the creation of a theoretical classification of morphological variation in ceramic recipients for those categories which were adequately represented in our sample. These are referred as potential "Stable Variety of Shapes" (SVS).

As a result of this initial classification, diagnostic attributes were determined. Each shape includes, in addition to diagnostic attributes (character attributes) peculiar for example to one shape, other attributes common to several shapes, but necessary for a complete description of the vessel's profile. Therefore, diagnostic attributes were combined with non-diagnostic ones. Qualitative and quantitative attributes (or parameters) were taken into account.

As a result, a list of attributes for the formalized description of halafian painted pottery morphology was compiled. So, every fragment was described through 76 positions, of which 42 were morphological characteristics made up of 22 qualitative (or attributes)

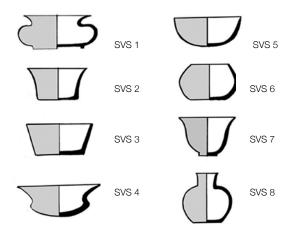


Figure 3. Stable Variety of Shapes (SVS) of mass painted pottery from Yarim-Tepe II.

and 20 quantitative (or parameters) traits. The list of attributes was illustrated by drawings which represent all possible variations of the diagnostic attribute states.

The information collected provided a database for calculations and analysis. As a result, fragments were grouped into morphological units via revealing stable sets of states of attributes. It means that "nuclear" groups (or Stable Varieties of Shapes) must have, on the end of the correlated attribute chains, a larger frequency of realizations, dividing them from morphological groups which obtained low realizations. There are, among them, single pottery fragments and, sometimes, small intermediate groups of fragments having an equal correlation with two different Stable Variety of Shapes groups. Showing these groups provided a means of determining the shape interaction systems that affected the process of evolution of the halafian painted pottery assemblage. Such groups are important for the analysis of the shape formation process, and reveal the existence of homogeneous and intrusive parts inside the halafian pottery corpus. The result of the classification work shows eight Stable Variety of Shapes groups of vessels on the upper taxonomic level (Fig. 3).

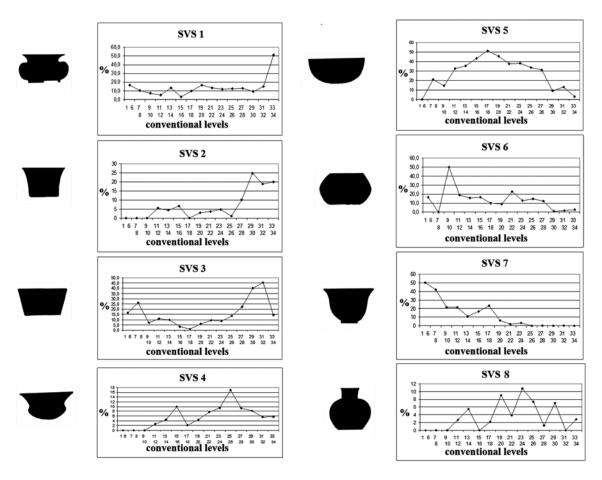


Figure 4. Percentage distribution of SVS morphological groups in cultural deposits (conventional levels) of Yarim-Tepe II.

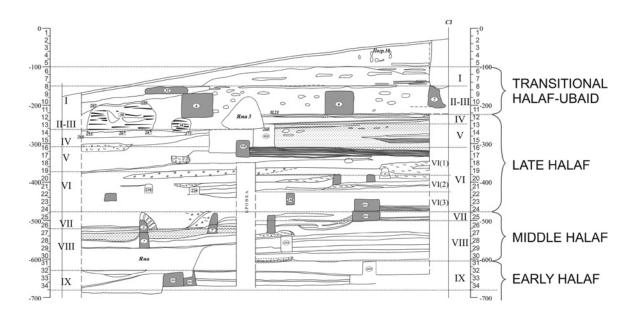


Figure 5. Yarim Tepe II, square 28 section. Concordance of building horizons, conventional levels, and proposed periodisation of the Halafian cultural deposits.

Because of all the painted morphologically valid ceramic material from an area, a similar trench was sampled; it allowed us to define metric units for the stratigraphic analysis. All the cultural deposits of Yarim Tepe II were divided into 34 conventional levels of 20 cm each. Nevertheless, in order to obtain the necessary sample size two levels had to be combined, and, in the eroded uppermost part, even 6 subdivisions had to be unified for this analysis.

The distribution dynamics of each morphological group in the cultural deposits was analyzed on the basis of ratio changes during the process of evolution (Fig. 4). Distribution analysis (in conventional levels) of percentage values of morphological groups of the upper taxonomic level (or SVS first degree) and the lower taxonomic level (or SVS second degree) allows us to reconstruct the pattern of the morphological evolution of halafian painted pottery. As a result, a 4-stage model was proposed (Amirov/Deopeak 1997: 69-86) for the Yarim Tepe II cultural evolution. It describes the second part of the early halafian stage (building horizon 9 or conventional levels 34-31), the middle halafian (building horizons 8-7 or conventional levels 30-25), the late halafian (building horizon 6-4 or conventional levels 24-12) and the transitional Halaf - Ubaid stage (a stage of acculturation) (building horizons 3-1 or conventional levels 11-7) (Fig. 5).

HALAF AND UBAID CONTACTS

As it was noted, morphology analysis allows revealing the homogeneity core of indigenous halafian shapes and intrusive pottery groups that do not have genetic roots inside the halafian pottery corpus. An intrusive one is the bell-shaped form (SVS 7), which is not only unknown in lowermost levels of Yarim Tepe II, but it is morphologically alien to halafian pottery. This shape is originated in the Ubaidian culture of Southern Mesopotamia, where pottery vessels of this morphology were among the most popular ceramic shapes. Usage of this morphological group inside the halafian assemblage reflects the graduate increment of South Mesopotamian influence to halafian pottery.

The contacts between the Halaf and Ubaid cultures were a process which lasted a long period and was realized in both directions. As an example, it is possible to mention imitations of halafian motives in Ubaid pottery from the sites of R'as al-Amiya, and Tell Abada (Stronah 1961, 95-137; Jasim 1981,102, fig.1), up in the Lower Mesopotamia. From the other side, on the mature stage of the evolution, the south Mesopotamian Ubaid culture was widespread in the Jazira region, where the Ubaid archaeological complex of North Mesopotamia was constituted. One of the bright examples of Ubaid cultural diffusion to the north Mesopotamia is the neighbor to Yarim Tepe II, the settlement of Yarim Tepe III, where due to the process of acculturation, the halafian material culture was completely changed to a classical northern Ubaid one (Мунчаев/Мерперт 1982,133-149). The life on Yarim Tepe II settlement, by some unclear reasons,

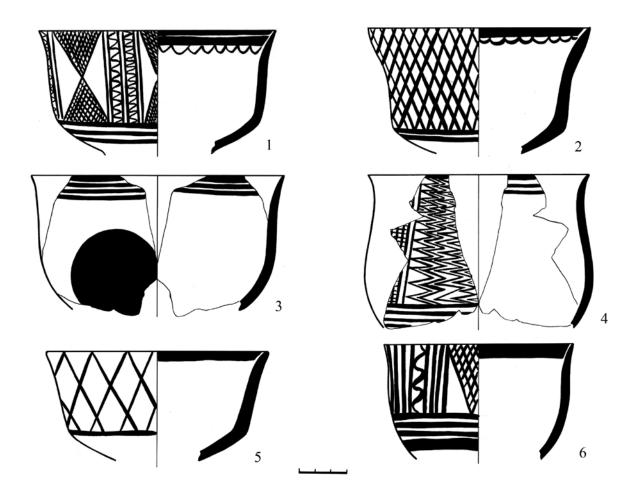


Figure 6. Bell-shaped (SVS 7) painted pottery from Yarim-Tepe II.

stopped much earlier. Accordingly, the process of Halaf-Ubaid transformation in the cultural deposits of Yarim Tepe II, the site is presented as an unfinished one.

As it is known, the first appearance of sedentary population to the alluvium lowland plains of Southern Mesopotamia is dated approximately close to the beginning of the VIth millennia, and could be related, from one side, with Huzestan and the Deh-Luran valley in particular, and from the other side with Samarra sites from Dyala, and the Zagros piedmont region (Hole/Flannery/Neely 1969; Jasim 1981, 101-104). The earliest period of the Ubaid evolution is explored in Tell Oueilly settlement, 3,5 km from Larsa (Huot 1992, 188-195). The deepest levels of the site remain uninvestigated because they are placed under ground water level.

Here it is worth noting that the initial manufacturing of ceramics made on rotating mechanisms, after H. Nissen, is strongly associated with the Ubaid culture in Southern Mesopotamia (Nissen 1988, 46-47; Nissen 1989, 245; Pollok 1999, 3; McIntosch 2005, 58; Stein 2010, 23, 28; Karsgaard 2010, 51, 56; Weeks et al.

2010, 246, 256; Özbal 2010, 45). But, as a special topic, this item remains out of investigation. In spite of this fact, the earliest Oueilly pottery (Ubaid 0) is undoubtedly handmade. Apparently, the earliest Mesopotamian pottery made by rotating devices appeared approximately within the Ubaid 2 period. This new technology is visually marked by the appearance of a thin linear decoration on the vessels, which is impossible to paint without centralized rotation (for example: Lebeau 1991, 241-266, pl.IV-VIII).

In the Northern Mesopotamia, ceramics made with rotating mechanism have appeared for the first time in the halafian settlements. For example, in Yarim Tepe II, within the collection of predominately handmade halafian painted ceramics, pottery made on rotating mechanism was revealed. Rotation traces on the surface of the halafian vessels from Yarim Tepe II were identified after a technological analysis, made in the Moscow Archaeology Institute, by prof. A.A. Bobrinsky at the beginning of 1990s. Rotation traces on Yarim-Tepe II ceramics were marked mainly on the single morphological group that is described as bell-shaped (SVS 7) form (Fig. 6).

Figure 7. Painted pottery typical from the lowermost levels of Yarim-Tepe II.

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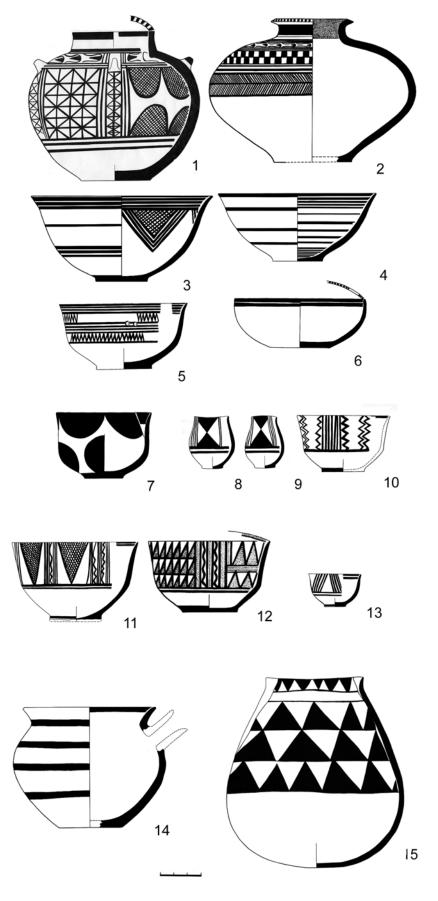


Figure 8. Painted pottery typical from the uppermost levels of Yarim-Tepe II.

For the first time, bell-shaped vessels were fixed in the cultural deposits of Yarim-Tepe II in the lower part of the sixth building horizon (within conventional levels 23-24) that is dated to the very beginning of the late period of halafian evolution. Here SVS 7 group comprised approximately 2% of all of the painted ceramic assemblage. To the end of the late period that is stratigraphically marked by the fourth building horizon (or conventional levels 13-14) the quantity of bell-shaped painted vessels reached a capacity of 10-15%. From the beginning of the transitional period, which is covered by the third building horizon (or conventional levels 11-12), the quantity of this group exceeds 20% of all painted pottery, reaching the end of the settlement's life on the level of the first building horizon (or conventional levels 8-7 and uppermost deposits) with no less than 50% of all used ceramics shapes.

So, at the end of the settlement's life, this variety of vessels became the most popular and statistically important morphological group among painted pottery of the site (Амиров 1994, 11-15; Amirov/ Deopeak 1997, 69-86; Амиров 2007, 465-472). The influence exercised by vessels of this group to the traditional Halafian ceramics complex of Yarim Tepe II was extremely strong. It was reflected not only in the considerable quantity increase of bell-shaped vessels in the upper part of Yarim Tepe II cultural level, but also in the mimicry of traditional Halafian morphological shapes to morphology peculiarities of this group (Амиров 1994, 11-15; Amirov/Deopeak 1997, 69-86). Accordingly, a high amount of ceramic vessels from Yarim Tepe II, dated to final period of the settlement, was made (or decorated) by using a kind of rotating mechanism.

CONCLUDING REMARKS

As it was shown above, the initial Ubaid impact to the Halaf culture in the Sinjar plain is documented since the very beginning of the late stage of the halafian evolution. So, the process of increasing Ubaid influence to the halaf culture took a long span of time as it is clearly demonstrated by the evolution of Yarim Tepe II pottery (Fig. 7; 8). The process of cultural transformation in the Yarim Tepe halafian settlements could be explained by the fact, that among indigenous population, most likely in the site of Yarim Tepe III, a group of alien, Ubaid migrants, was settled. Newcomers would have brought cultural and technological innovations which were realized in the gradual increasing influence to the local ceramic production. The introduction of the use of rotating mechanisms in ceramic fabrication resulted in a gradual disappearance of the morphological and decorative peculiarities of the halafian pottery. So, as the driving mechanism of Halaf-Ubaid acculturation

process, it could be proposed as an advanced technological progress, particularly in ceramic manufacturing, already achieved in South Mesopotamia.

It should be noted that the Halafian influence, in form of cultural impact or in form of ceramics imports circulation, is known far away from its motherland, and is outlined from Transcaucasia in the North to Lower Mesopotamia in the South, and from Western Iran in the East to Mediterranean coast in the West. But actually, the indigenous Halaf territory is marked by the existence of a set of important cultural attributes which could be named as the "halafian trinity". It means that the image of the classic Halaf culture could be determined by the simultaneous use of painted ceramics, round planned dwellings, and character painted female figurines.

In the Yarim Tepe II site, the "halafian trinity" is completely present in lower levels of the settlement. In the uppermost levels, the process of "halafian trinity" destruction could be observed. The last levels where all three characteristic halafian attributes are presented in organic unity are building horizons 5-4 (or conventional levels 18-13), which are dated to the second half of Late Halaf period. The uppermost building horizons 3-1, which are interpreted as Transitional Halaf -Ubaid period demonstrate from one side the intensive change of morphology and the decorative character of the halafian painted pottery (including a clear appearance of some Ubaid painting motifs). From another side, the gradual destruction of the architecture indicates the presence of the typical halafian settlement, which is characterized by the proportional coexistence of round planned buildings (dwellings) and rectangular utility constructions, as well as the termination of the use of halafian female figurines. For example, the average ratio for lower levels of Yarim Tepe II settlement is approximately one "tholos" to four-five rectangular constructions. In the uppermost levels, (it is fair to say, partly destroyed) the number of round planned constructions is strongly reduced. The same could be said about female figurines. The last one in Yarim Tepe II was found in the N14 rectangular construction, related to 3-rd building horizon (level).

So, the evolutionary transformations noted for the ceramic morphology of Yarim Tepe II is supported by the observation of changes concerning other important attributes determining the image of the Halaf culture. A joint analysis of materials from the uppermost levels of Yarim Tepe II demonstrates only an early stage, or an unfinished process of acculturation of the Halaf culture by the Ubaid. In the adjacent halafian settlement of Yarim Tepe III, the process of cultural transformation was completely realized.

BIBLIOGRAPHY

АМИРОВ, Ш.Н. 1994, Морфология керамики халафской культуры Северной Месопотамии (По материалам поселения Ярым Тепе 2). Автореферат диссертации на соискание ученой степени кандидата исторических наук. Москва 1994г.

AMIROV, SH. N., DEOPEAK, V. 1997, Morphology of the Halafian Painted Pottery from Yarim Tepe 2, Iraq // Baghdader Mitteilungen 28. 69-86.

АМИРОВ, Ш.Н. 2007, Методика и исследования морфологии халафской керамики. // в кн. Три четверти века. Д.В. Деопику – друзья и ученики. М.2007. с.465-472

HOLE, F., FLANNERY K.V., NEELY J.A. 1969, Prehistory and human ecology of the Deh Luran plain. An early village sequence from Khuzistan,Iran. Memoirs of the Museum of Anthropology, University of Michigan, No 1. Ann Arbor, 1969, XV, 438 pp., 140 figs — 44 bis.

JASIM, S.A. 1981, Excavations at Tell Abada. Iraq. *Paleorient vol.*7/2 1981 pp.101-104.

HUOT, J.L. 1992, The first farmers at Oueili. *The Biblical Archaeologist*, vol. 55. n. 4 (Dec 1992), 188-195.

KARSGAARD, P. 2010, The Halaf-Ubaid Transition: a transformation without center? in eds. Carter R.A. Philip G. Beyond the Ubaid. Transformation and Integration in the Late Prehistoric Societies of the Middle East. Studies in Ancient Oriental Civilization n.63. Oriental Institute of the University of Chicago.

LEBEAU, M. 1991a, La ceramique Obeid 1 de Tell el'Oueili: Rapport preliminaire 'Oueili Travaux de 1985 sous la direction de J-L Huot. Paris, 211-240.

LEBEAU, M. 1991b, La ceramique Obeid 2 et 3 de Tell el'Oueili: Rapport preliminaire 'Oueili Travaux de 1985 sous la direction de J-L Huot. Paris, 241-266.

LEBEAU, M. 1983, La ceramique du Niveau Obeid 4

de Tell el'Oueili: Rapport preliminaire Larsa et 'Oueili Travaux de 1978-1981 sous la direction de J-L Huot. Paris, 81-133.

MCINTOSH, J.R. 2005, Ancient Mesopotamia-new perspectives. Santa Barbara.

МУНЧАЕВ, Р.М, МЕРПЕРТ, Н.Я. 1982, Поселение убейдской культуры Ярым Тепе 3 в Сеаерной Месопотамии (из итогов работ советской экспедиции в Ираке) Советская Археология, 133-149.

NISSEN, H.J. 1988, The Early History of Ancient Near East 9000-2000 BC. Chicago&London.

NISSEN, H.J. 1989, The Ubaid Period in the context of the Early History of the Ancient Near East // in E.F.Henricson & I.Thuessen (eds) Upon this foundation-The Ubaid reconsidered. Cobenhaven.

ÖZBAL, R. 2010, A comparative look at Halaf and Ubaid period. Social Complexity and the Tell Kurdu case, *Tüba-Ar 13*.

POLLOCK, S. 1999, Ancient Mesopotamia. The Eden that never was. Cambrige.

STEIN, G. 2010, Local Identities and interaction spheres; Modelling Regional Variation in the Ubaid Horizon//in eds. Carter R.A. Philip G. Beyond the Ubaid. Transformation and Integration in the Late Prehistoric Societies of the Middle East. Studies in Ancient Oriental Civilization n.63. Oriental Institute of the University of Chicago. 2010.

STRONAH, D. 1961, Excavations at Ras al-Amiya. *Iraq* 23, 95-137.

WEEKS, L., PETRIE, C.A., POTTS, D. 2010, Ubaid related-related? The Black-on Buff ceramic Tradition of Highland Southwest Iran // in eds. Carter R.A. Philip G. Beyond the Ubaid. Transformation and Integration in the Late Prehistoric Societies of the Middle East. Studies in Ancient Oriental Civilization n.63. Oriental Institute of the University of Chicago.