doi: 10.17746/7803-0330-5.2022.269-273
УДК 902

A.I. Seliutina[1]✉, Hyeonggil Jang[2]

[1]Novosibirsk State University
Novosibirsk, Russia
[2]Chungbuk Research Institute of Cultural Heritage
Daejeon, Republic of Korea
E-mail: selyutina.anna12@gmail.com

The Evidence and Characteristics of Korean Peninsula Initial Upper Paleolithic and its Connections with Altai Region

This article presents the results of a study of the initial stage of the Upper Paleolithic of North and Northeast Asia on the materials of Denisova Cave, Kara-Bom, Ust-Karakol and Suyanggae Loc. 6 sites. The Upper Paleolithic deposits of these sites accumulated during MIS 3 and MIS 2. Two lithic traditions of Altai Mountains belong to the beginning of the Upper Paleolithic: Kara-Bom and Ust-Karakol cultures. Lithic materials of these traditions correlate with the Upper Paleolithic tools of 1st–4th cultural layers of Suyanggae Loc. 6 site. This site is located in Danyang, South Korea. Researches of recent years reveal the connections of Suyanggae industry and Altai Upper Paleolithic traditions. This allows drawing parallels with the Upper Paleolithic industry of the Denisova Cave, since some of the relics from the East and South Chambers are attributed to the IUP period. Coexistence of these two types in the Altai region, however, does not deny the fact that they appear at different levels in the site of Suyanggae Loc.6. Difficulty of applying the traditional IUP concept for Northeast Asia, which simply implies both chronological and cultural characteristics, is obvious. In order to explain this period from an Asian perspective, it is necessary to divide cultures into three regions: 1) traditional IUP region; 2) IUP convergence region, and 3) conservative. Before the discovery of Suyanggae Loc.6 Korean Peninsula was evaluated as a conservative area where early blade-tool culture did not appear, but now this attribution has been revised.

Keywords: *Korean Peninsula, Suyanggae Loc. 6, Initial Upper Paleolithic, Altai region, Kara-Bom tradition, Ust-Karakol tradition, Denisova Cave, Three IUP Variants Model.*

А.И. Селютина[1]✉, Чан Хёнгиль[2]

[1] Новосибирский государственный университет
Новосибирск, Россия
[2] Исследовательский институт культурного наследия Чхунбук
Тэджон, Республика Корея
E-mail: selyutina.anna12@gmail.com

Доказательства и характеристики начального верхнего палеолита Корейского полуострова и его связи с Алтаем

Данная статья представляет результаты исследования начальной стадии верхнего палеолита Северной и Северо-Восточной Азии по материалам стоянок Денисова пещера, Кара-Бом, Усть-Каракол и Суянгэ-6. Верхнепалеолитические отложения в этих памятниках накапливались в течение МИС 3 и МИС 2. К началу верхнего палеолита относятся две каменные традиции Горного Алтая: кара-бомская и усть-каракольская культуры. Каменные материалы этих традиций коррелируют с верхнепалеолитическими орудиями из 1–4 культурных слоев стоянки Суянгэ-6. Эта стоянка расположена в Таняне, Южная Корея. В исследованиях последних лет показана связь индустрии Суянгэ и традиций верхнего палеолита Алтая. Это позволяет провести параллель с верхнепалеолитической индустрией Денисовой пещеры, так как часть находок из Восточной и Южной камер относятся к периоду начального верхнего палеолита. Сосуществование этих двух типов на Алтае, однако, не отрицает того факта, что они появляются на разных уровнях на стоянке Суянгаэ-6. Очевидна трудность применения традиционной концепции начального верхнего палеолита для Северо-Восточной Азии, которая подразумевает как хронологические, так и культурные характеристики. Чтобы объяснить этот период с азиатской точки зрения, необходимо разделить культуры на три региона: 1) традиционный начальный верхнепалеолитический регион; 2) начальный верхнепалеолитический регион со сходствами и 3) традиционный. До открытия Суянгэ-6 Корейский полуостров оценивался как традиционная область, где ранняя культура лезвийных орудий не проявлялась, но теперь эта атрибуция была пересмотрена.

Ключевые слова: *Корейский полуостров, Суянгэ-6, начальный верхний палеолит Алтая, кара-бомская традиция, усть-каракольская традиция, Денисова пещера, модель трех вариантов начального верхнего палеолита.*

The question about existence of the Initial Upper Paleolithic in Northeast Asia, namely, on the Korean Peninsula, has always been debatable. Since the Initial Upper Paleolithic makes a transitional stage between the middle and the late one, the problem of identifying the Middle Paleolithic in Korea has also contributed to controversy. According to recent studies, however, Levallois technology is proven to have existed on the Korean Peninsula, making the results of identification of the Initial Upper Paleolithic culture there adequate.

The Upper Paleolithic on the Korean peninsula can be divided into early period of the Upper Paleolithic and later period of the Upper Paleolithic based on the appearance of blades and microblades. It is also known as the period around 25ka.Suyanggae Loc. 6 is one of the Korean sites showing a typical blade tool industry of the Initial Upper Paleolithic. Located in Danyang, Chungcheong province 4 layers of it were verified to be formed during MIS 3 (cultural layers 3,4) – MIS 2 (cultural layers 1,2) in the Upper Paleolithic. Each Paleolithic cultural layer, based on the aspect and absolute dates of the Stone Age group, shows a unique cultural image thatcan comprehensively view the technological system of the modern human stoneblade culture from the beginning of IUP (45–40 ka) and to the microblade stone industry. In Suyanggae Loc. 6, there are 4 cultural layers whichinclude periods from the early stage of the Upper Paleolithic to the later period of the Upper Paleolithic. These layers were corresponded to 46~17ka.

Through these data it is possible to identify the aspect of change in the stone tool-making technique [Kim. et al., 2021].

According to the analysis of lithic complex in the 4th cultural layer, we can say that it was a workshop for acquiring blades and making tanged points.Three main attributes within this technological system are: 1) bifacial flaking system seen in a discoidal core with vestiges of Levallois technology, 2) emergence of the sub-wedge shaped core-making technique [Lee H.J., 2004], 3) change in the technological system, namely the size of the blade core and blade, is the indicator for the early stage of the Upper Paleolithic period [Lee H.J., 2020]. The absolute dating and this aspect of the lithic complex of 4th cultural layer show some features of the technological system of the IUP which is based on the early blade technology and which retains some characteristics of Levallois technique. Suyanggae's variant of lithic industry shows similar characteristics to the Kara-Bom variant which belongs to Altai Upper Paleolithic industries [Derevianko, 2005]. Two transitional industrial traditions from the Middle to the Upper Paleolithic are Kara-Bom and Ust-Karakol cultures, well-traced at the sites of the early stage of the Upper Paleolithic. On the basis of the Ust-Karakol in the Middle and Upper Paleolithic of Siberia, Mongolia, China, Korea, Japan, there were formed many cultures with end cores and wedge-shaped cores and microblades. Research in Altai revealed origins of this technical tradition in lithic processing, which, in various versions, was widely distributed in East and North Asialater. Processing technology of stone raw materials within the framework of the Kara-Bom tradition was characterized by a combination of planar and volumetric parallel splitting in the context of obtaining blades, with subordinate value of Levallois splitting [Slavinsky, Rybin, Belousova, 2016]. The industries of the Kara-Bom tradition were characterized by a combination of Upper Paleolithic (scrapers, incisors, chisels, truncated chips, leaf-shaped bifaces) and Middle Paleolithic tool types (Levallois points, side-scrapers). It was assumed that traditions of Altai Mountains could serve as a source for the formation of a group cultural signs for the Initial Upper Paleolithic of Southern Siberia, Mongolia and Northeast Asia. Existence of two Altai lithic culture systems that appeared in the early stages of the Late Paleolithic in the Suyanggae Loc. 6 site has been confirmed. The 4th cultural layer of this site is a Kara-Bom type that produces large stone blades, and the 3rd cultural layer is the Ust-Karakol type that focuses on small and medium-sized stone blades. The Ust-Karakol cultural tradition was characterized by a combinationof the following technological features: Levallois and radialsplitting, technology for the production of blades with prismatic cores, microbladesfrom cone-shaped and end cores, including wedge-shaped using the pressing technique.

Denisova Cave is a reference archeological site of the Middle and Upper Paleolithic in Altai region. The Upper Paleolithic industry of Denisova Cave is rich enough, some of the relics from the East and South Chambers are attributed to the IUP period. According to the absolute dates of the Pleistocene layers in the entryway zone of the South Chamber, layer 12 was formed in the second half of MIS 4, and layer 11 accumulated in the first half of MIS 3. The sediments of layer 9 are presumably associated with MIS 2 [Shunkov, Kozlikin, 2021]. Cultural and chronological analogues of the industry

of the Early Upper Paleolithic from the South Chamber are archaeological materials from layer 11 in the central hall, layer 11.1 in the eastern gallery, layers 8 and 7 on the entrance site of Denisova Cave. In Altai, similar lithic complexes were studied at the sites such as Ust-Karakol (layers 11–8), Anui–4 (layers 12 and 11) and others. These materials are associated with those identified in the Early Upper Paleolithic of Altai by the Ust-Karakol industrial variant. Therefore, we can draw parallels between layers 9 and 11 of the South Chamber of Denisova Cave with layers 1–4 of the Suyanggae Loc.6 site. Also, the features of the Ust-Karakol industrial tradition can be found both in the Upper Paleolithic layers of the Denisova Cave and the 3rd cultural layer of Suyanggae loc.6 site. However, while these two types coexist at a similar time in the Altai region, they appear at different levels in the site of Suyanggae Loc. 6. To be more precise, it can be shown as the last stage of the IUP, with some remains of technology, rather than a typical pattern of the IUP.

Technological system of the artifacts of the 3rd cultural layer reflects the characteristics of the Early Upper Paleolithic of Korean peninsula. According to the analysis of lithic complex in this layer, it is possible that it was a workshop for acquiring blades and making tanged points similar to the 4th cultural layer. The main characteristics of the stone tool technological system include the expansion of the medium and small blades, the emergence of the primitive microblade technological system [Lee S. W., 2020], continuity of using sub-wedge-shaped core for blades, and the vertical flaking for blades and its practical use for making tanged points. In particular, the biggest change in the blade technological system of the 3–4 cultural layers is the change in the size of the blade and the change in the complex technological system, including the selection of materials. This pattern is the result of complex modification of the increasing need for artifacts using in small and medium-sized blades of the change of economic activity of Suyanggae region. According to the recent research, it is difficult to apply the traditional concept of Initial Upper Paleolithic to Asian variants, which simply incorporated both chronology and cultural characteristics [Derevianko, 2010; Kuhn S., 2019]. Thus, in order to explain this period in Asian continentcomprehensively, it is easy to understand the chronology of IUP using such a term as ‘Three IUP Variants Model’: 1) Variant I: Traditional IUP region, 2) Variant II: IUP hybridization region, 3) Variant III: Conservative region. This model is capable of setting the various cultural features of the IUP broadly, from the Middle-Upper Paleolithic transition to the Upper Paleolithic. In addition, it will be helpful for systematical understanding of the emergence of modern humans, the diversity of stone tool production systems and the convergence of regional industries [Lee H.J., 2018].

Before the excavation of the 3rd and 4th cultural layers of the Suyanggae Loc. 6, Korean peninsula was also estimated as a conservative area where the early stage of the blade tool industry did not appear, but now it is considered to be a region that has a unique stone tool making technology of Upper Paleolithic in East Asia, where the blade tool industry coexists with the pebble tool tradition [Lee H.J., 2015a; 2015b].

References

Derevianko A.P. Formation of Blade Industries in Eastern Asia. Archaeology, Ethnology and Anthropology of Eurasia, 2005. Vol. 24. P. 2–29. (In Russ.).

Derevianko A.P. Three scenarios for the Middle to Upper Paleolithic transition. Scenario 1: the Middle to Upper Paleolithic transition in northern Asia. Archaeology, Ethnology and Anthropology of Eurasia, 2010. Vol. 38. P. 2–38. (In Russ.).

Kim K. J., Kim J. Y., Kim K. W., Lee S. W., Woo J. Y., Lee Y. J., Jull T. Radiocarbon Ages of Suyanggae Paleolithic Sites in Danyang, Korea. Radiocarbon, 2021. Vol. 63. P. 1429–1444.

Kuhn S. Initial Upper Paleolithic: a (near) global problem and a global opportunity. Archaeological Research in the Asia, 2019. Vol. 17. P. 2–8.

Lee H.J. A Study of Technological Context Between Sub-wedge Shaped Core and Blade Tool Culture of Upper Paleolithic in Korea. KomunHwa, 2004. Vol. 63. P. 65–82. (In Kor.).

Lee H.J. Study of Character of Coexistence Model and Cultural Complexity system of Upper Paleolithic in Korea. Journal of Korean Paleolithic Society, 2015b. Vol. 32. P. 36–69. (In Kor.).

Lee H.J. The Study on Cultural Dynamics of Appearance and Dispersal of Modern Human of Initial Upper Paleolithic in Northeast Asia, Journal of Korean Paleolithic Society, 2018. Vol. 38. P. 21–41.

Lee H.J., Woo J.Y., Lee Y.J. A Study of Blade Technological System of Initial Upper Paleolithic in 4th Cultural Layer of Suyanggae Loc. VI. Journal of Museum Studies, 2020. Vol. 39. P. 83–112. (In Kor.).

Lee H.J.. Study of origin and distribution of blade and microblade industry in Korea. Journal ofKorean Paleolithic Society, 2015a. Vol. 31. P. 84–115. (In Kor.).

Lee S.W. Emergence of Microblade Culture in Suyanggae paleolithic site. Journal of Museum Studies, 2020. Vol. 39. P. 113–131. (In Kor.).

Shunkov M. V., Kozlikin M. B. Early Upper Paleolithic Stone Industry from the South Chamber of Denisova Cave: New Evidence. Bulletin ofthe Irkutsk State University. Geoarchaeology, Ethnology, and Anthropology Series. 2021. Vol. 38. P. 15–23. (In Russ.).

Slavinsky V.S., Rybin E.P., Belousova N.E. Variation in Middle and Upper Paleolithic techniques of lithic reduction at Kara-Bom, the Altai Mountains: Refitting studies.Archaeology, Ethnology and Anthropology of Eurasia, 2016. Vol. 44. N 1. P. 39–50. (In Russ.).

Seliutina A.I. https://orcid.org/0000-0002-6356-3287
Jang H.G. https://orcid.org/0000-0001-6763-7899