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Reassessment of the Preliminary Report on Prehistory of Southwestern Iran (Hole & Flannery 1967)

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Abstract

There has been more than four decades since Frank Hole and Kent Flannery conducted a field expedition in central Zagros Mountains located in western Iran, in 1963. From then onward, numerous discoveries and field projects have been done in this region. Some of these findings may contradict the report of the original survey. Although the goal of this article by no means, is to criticize the 1967 report, it sounds unavoidable to incorporate the new discoveries in it. For instance, the author of this article believes that the twelve missing sites in the 1963 survey were found later, hence; new discoveries in case of the presence of Levallois technique in the Zagros Mountains could change our understanding regarding the Middle Paleolithic of Zagros.

Keywords: Zagros Mountains, Middle Paleolithic, Levallois technique

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Introduction

As a part of Prehistoric Project of Oriental Institute, University of Chicago, two of the Late Braidwood's students (Frank Hole and Kent Flannery) conducted some archaeological surveys and excavations in west and southwestern Iran in 1961. The report of this field surveys was published in 1967 entitled "the Prehistory of Southwestern Iran: Preliminary Report" (Hole and Flannery 1967). Considering the time elapsed from the date of the original field work as well as numerous theoretical and technical innovations and discoveries in the world, Paleolithic archaeology in general and Paleolithic archaeology of Iran in particular, the need for reassessing the preliminary report seems unavoidable. Needless to say, the 1967 field expedition was among the most scientifically advanced expeditions (e.g., it took into account interdisciplinary sciences such as Archaeobotany, Zooarchaeology, Paleoclimate, Ethnoarchaeology, etc). As such, the current article tries to incorporate the new discoveries and progress in the Paleolithic archaeology of Iran into the 1967 original report.

Further, this article would be focusing only on Paleolithic studies of the original report and integrate new data derived from other prehistoric periods in the proposed region.

Missing Sites

During the course of studies, Hole and Flannery surveyed 15 valleys in western Iran, in which the Khorramabad valley revealed as one of the most promising ones, with many large fresh water channels and caves. In their report, Hole and Flannery state:

"Thus far we have located seventeen Paleolithic sites which overlook the Khorramabad valley, and it is likely that more could be found by intensive survey" (Hole and Flannery 1967: 151)

Based on the survey report, although seventeen Paleolithic sites were marked, only five of them were mentioned in the text and subsequently selected for further indepth examinations (Caves: Ghamari, Kunji, Yafteh, rock shelters: Gar Arjeneh, and Pasangar), and there is no indication of the other twelve sites. Considering the strategic location of the Khorramabad valley and in order to complete the original survey, a field survey was conducted in the winter of 1999 by the author and his colleagues from the Iranian Center for Archaeological Research (ICAR). This field expedition re-emphasized on the great potential of the Khorramabad valley and provided detail information on 21 sites (five more sites were included) assuming that the twelve missing sites might be among them (Roustaei et al. 2002, 2004).

Continuity of Industries

One of the key questions highlighted in the original report was the issue of continuity among different Paleolithic industries:

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"A critical question in the prehistory of the Zagros Mountains is the extent which the Mousterian, Baradostian and Zarzain industries constitute to a single living tradition. Are there discontinuities between the three industries, or does it grow out of the antecedent stage?" (Hole and Flannery 1967: 151)

To address this question, a comparative analysis of lithics collected from the five excavated sites was made. As can be seen in Figure 2 of the original report (Hole and Flannery 1967: 152), the comparative study encompassed only the most typologically distinguished pieces, and it seems that the role of technology was a bit overshadowed by overemphasizing on typology. As an illustration, cores, which are considered by most workers as one of the most important artifacts to address issues related to technology (Eren et al. 2008; Wallace and Shea 2006), were neglected:

"This analysis ignores tools which are relatively undiagnostic; such as… cores, core fragments, and waste flakes..." (Hole and Flannery 1967: 154-155)

Cores reconstructs the degree of access to the raw material (Dibble 1995), plus study of *chaînes opératoires* is crucial to establish the technological frame work used by the knappers (Kuhn 1995: 31-33). As a matter of fact, in most of the recent lithic analysis, workers conduct technotypological examinations on the assemblages in order to apply some type of relative chronologies. As such, hard hammers and direct percussion technique could be one of the indicatives of the Lower Paleolithic, core preparation and Levallois technique could have been used to detect the Middle Paleolithic, and profusion of blades and use of pressure flaking is among the most important factors to assign an assemblage to the Upper Paleolithic period.

The original report used the index of secondary retouched tools to the waste flakes (Hole and Flannery 1967: 155, Table II) to propose some patterns to evaluate the degree of knapping efficiency from Middle to the Epipaleolithic period at Khorramabad sites. Concerning the Mousterian occupations (Ghamari and Kunji) this index is 38, for the early upper Paleolithic of Yafteh is 35, for middle and late upper Paleolithic of Yafteh are 10, and 7, and 4.5 for the upper Paleolithic of Pasangar and 9 for the Epipaleolithic of the same site.

Undoubtedly, there has been a significant improvement in knapping techniques, selection of raw materials, and forging strategies from the lower Paleolithic to the Epipaleolithic period. However, the sites selected for this comparison must provide homogeneity in geomorphology and land form in order to evaluate the degree of knapping efficiency in different periods. Among the selected sites,

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only three (Ghamari, Kunji, and Yafteh) could be considered geomorphologicly homogenous, and the rest have potentials to be considered as base camps. The other one (Pasangar) is a small rock shelter with severely eroded entrance, which by no means (e.g., size, shape, location, and function) could be considered equivalent to the former three. Therefore, it seems that clustering all of the mentioned sites and applying the index of secondary retouched tools to the waste flakes equally to them eventually misled the research and has produced some arguable results.

Levallois Technique

One of the technical issues touched by the Hole and Flannery is the diminutive presence of Levallois technique in the Luristan Mousterian:

"The technique of the Luristan Mousterian is non-Levallois, like that observed elsewhere in the Zagros (e.g., Shanidar, Hazar Merd, Warwasi, Bisitun)" (Hole and Flannery 1967:155)

Abundance of Levallois technique in an assemblage is one of the key factors to assign such industry to the Middle Paleolithic (Monnier 2006). The term Levallois was first used in the early 1860 to describe large flakes discovered at the suburb of Levallois-Perret in Paris (Mortilet 1883: 240, 255). This technique has been considered by many authorities as an index fossil of Middle Paleolithic industries since it was first recognized in the nineteen century (Mellars 1996: 61). One of the appealing points concerning Levallois technique is the abundance of various explanations for it, which some sound more or less contradictory.

As an example Bordes -one of the pioneers in the study of Middle Paleolithic lithic industries- has suggested that Levallois technique was originally invented to distinguish flakes with the signs of scars on their dorsal part, which these scares were fashioned during the process of core preparation (Bordes 1961). Perhaps Böeda's description of Levallois technique may be considered as one of the most accepted ones. Based on this description, two main stages were identified for the core preparation process: first, preparing continuous platforms all around the core by striking around it, second shaping the core by striking on the platforms that have already been prepared in the first stage (Böeda 1988). The result of this process is to predict the flake shape before detaching it from the core.

Lack of enough concentration on the preparation technique features on the debitage's platforms, and underestimating the importance of dorsal scars patterns on the Levallois flakes, as well as lack of substantial acceptance concerning the concept of Levallois technique in mid 50s, led Carlton Coon to conclude that the Levallois technique

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was not among the major aspects of Zagros Mousterian. In his original report, although Coon clearly identified and mentioned various Levallois techniques for excavation at Bisitun rock shelter in Zagros (Coon 1951: 59, Table 10C), however; H. L. Movius who was in charge of lithic analysis in the excavation claimed that the Levallois technique did not play significant rule in flint knapping activities in the Zagros region (Coon 1951: 90-91). The same scenario was repeated by Skinner who studied some portions of the Bisitun Middle Paleolithic assemblages as part of his doctorate dissertation and eventually he proposed that lack of Levallois technique is among the major features of the Zagros Middle Paleolithic industries (Skinner 1965).

Consequently, some significant improvements on recognition of various Levallois techniques (Baumler and Speth 1993; Dibble and Holdaway 1993), found that Skinner's approach to identify Levallois pieces were too conservative (Dibble 1984). Years later, H. L. Dibble reviewed the Bisitun collection and managed to identify noteworthy presence of Levallois elements in the collection (Figure 1). He calculated the Levallois index for the entire assemblage in Bisitun as 55.8 (Dibble 1984). It is crucial to mention that since the time of original excavations in the Khorramabad region (early 60s), there have been numerous surveys and excavations in this region and adjacent geographical areas that some led to the report of abundance of Levallois technique in the Zagros mountain sites. As an illustration, Mortensen claimed the presence of Levallois flakes at two of his sites (Huchi and Villa) located in Hulilan Valley in south of Luristan (Mortensen 1974a, b). In 2000, some surveys in the northern Zagros led to the discovery of some Paleolithic sites, among them Varjo-Chai revealed some Levallois elements (Biglari and Ghaffari 2004). One year later, a cave site near the city of Kermanshah (Central Zagros) named Do-Eshkaft was recorded by Iranian archaeologists. The further analysis of its lithic materials revealed its significance with regard to the high frequency of using Levallois technique in this site (Biglari and Heydari 2002). And the most recently, excavation at Martarik cave, located few hundred meters above the Bisitun rock shelter in the same rock massif (Bisitun Mountain) has clearly indicated abundance of Levallois technique in the Middle Paleolithic of Zagros (Joubert et al 2009).

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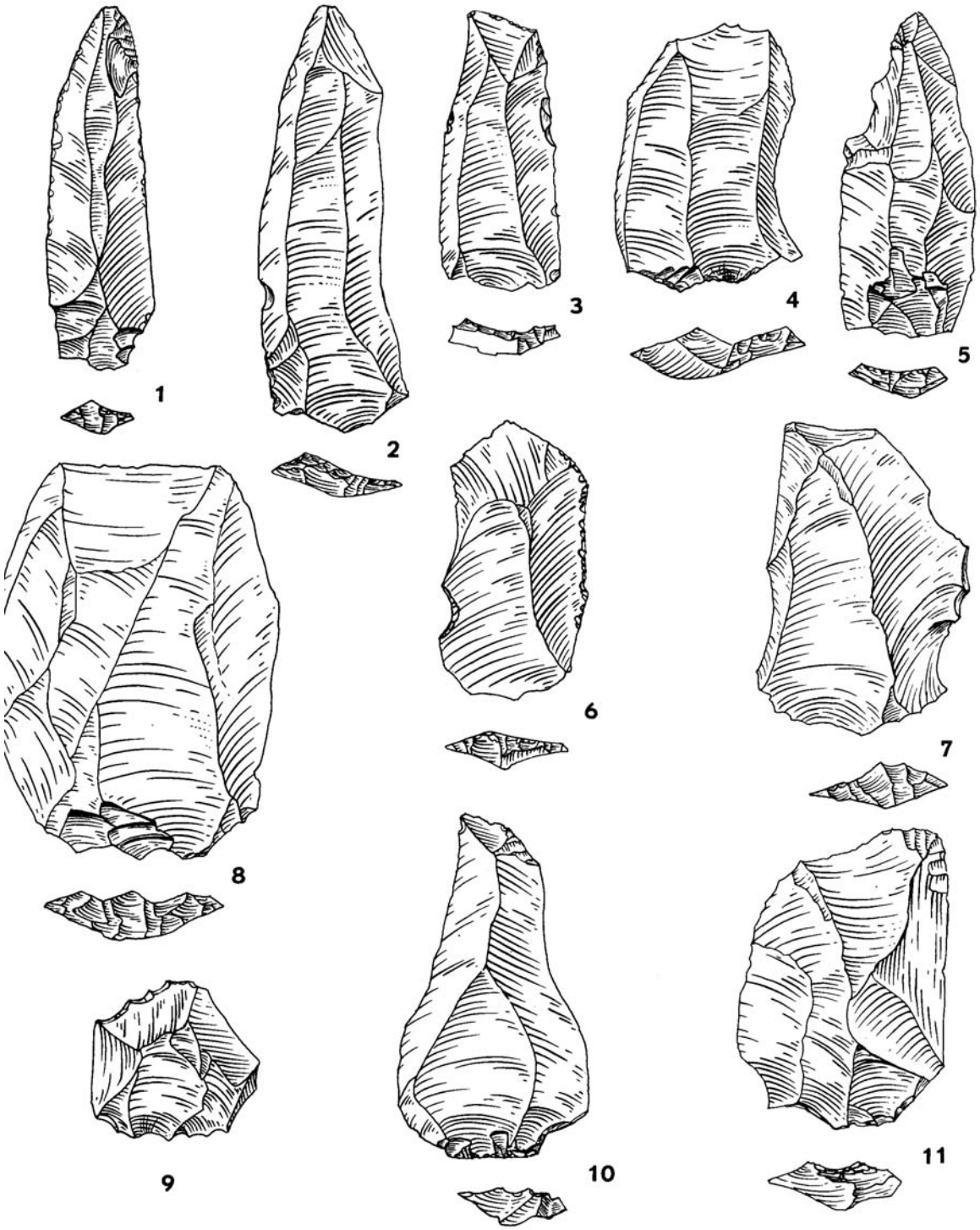

Figure 1 Levallois flakes and blades from Bisitun, Zagros, from Dibble 1984.

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Pages 155 and 156 of the original report indicate the significant presence of Levallois technique in the lowland Khuzistan:

"… in 1963 we discovered an open-air Mousterian site in lowland Khuzistan which had typical Levallois tortoise cores. This site, which lies at an elevation of ca. 200 meters, not far from the Deh Luran plain, has not yet been published. Two possibilities suggest themselves: either the difference is temporal (i.e., Levallois technique is present in an earlier Mousterian, possibly more abundant in the lowlands) or cultural (i.e., Levallois technique was used on the lowland steppe but not in the mountains, presumably by contemporaneous but culturally distinct peoples)" (Hole and Flannery 1967:155-156)

Some recent studies show that the presence of Levallois technique had higher frequencies in general among the early Middle Paleolithic industries (Monnier 2006). Consequently, the first scenario proposed by the author concerning the temporal variation in the Middle Paleolithic of Zagros seems justifiable. On the other hand, data regarding the Middle Paleolithic of Iran in general and that of Zagros in particular are too sporadic, which prevents one to propose any model for relationship between the elevation and Levallois technique. However, based on the current Paleolithic knowledge in Iran, it sounds that most of the Middle Paleolithic assemblages with high frequency of Levallois technique are located in the lowlands all across the country (e.g., Berillon et al. 2007; Chevrier et al. 2006; Vahdati Nasab 2009; Vahdati Nasab et al. 2009).

Pertaining to the cultural explanation for presence of Levallois technique in some sites, and refereeing such technique to a culturally distinct people, it seems that this idea at that time was driven from Bordes' works. Bordes claimed that the Mousterian industry refers to a complex of some cultural groups, which to some degree could be related or far from each other and some even with different origins (Bordes 1961, 1969). Recent studies show that there are many reasons to abandon Bordes idea. Binford suggested that the difference among assemblages could have been functional and in response to the different settlement patterns, mobility, and seasonal activities (Binford 1973).

Other studies imply that there is no direct consistency between human behaviors and certain stylistic or functional objects, especially in case of lithics, which can be reshaped or remodified during their use (Rolland and Dibble 1990). Raw material accessibility, quantity, and its other properties such as size and shape of cobbles can influence the final shape of tools during the tool manufacturing. Also the quality of raw material can affect the use of different flaking techniques. For example handaxes, scrapers, points, and Levallois assemblages are

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tend to be made on fine-grained materials like flint, whereas other tools such as denticulate and notches were made on coarser materials.

In addition, Dibble's work (1984, 1987, 1991, and 1995) has shown that in some cases the various scrapers in Bordes typology could be interpreted as just different stages of continuous transformation through resharpening and reduction process. As a matter of fact so many of retouched tools in Mousterian assemblages could just be considered the discard and end worn out objects rather than intentional tools related to a distinct cultural group. Finally Kuhn believes that the shape of the tool blank has more powerful effect on scrapers final shape than reduction process (Kuhn 1992).

Conclusion

More than four decades has been passed from the time of original survey was conducted by Hole and Flannery in central Zagros. During the last four decades and more importantly since 1990 there have been significant discoveries in the Paleolithic of Zagros and numerous sites have been recorded and some were selected for excavations. Therefore, the need for reassessment of the original report by incorporating some of the new data considered inevitable. Consequently, in the late 1999, the author along with fellow researchers re-surveyed the Khorramabad region with the aim to record some of the missing sites in the previous report. However, due to inadequate Paleolithic excavations in Zagros, our knowledge concerning the reconstruction of settlement patterns and identifying any continuity or discontinuity among different Paleolithic industries in Zagros is still in preliminary stages, and any firm judgment in this regard must be waited for more data driven from future excavations in this region. Dependency of Levallois technique to the elevation from the sea level in Zagros is an interesting subject; however, again due to the lack of Paleolithic surveys in the lowland Zagros not much could be said in this regard at this moment. But, new Paleolithic surveys and excavations in Zagros have revealed the fact that absence of Levallois technique could no longer be regarded as one of the features of the Zagros Middle Paleolithic industries.

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بازبینی گزارش مقدماتی پیش از تاریخ جنوب غرب ایران، نوشته فرنک هول و کنت فلنری-۱۹٦۷

حامد وحدتی نسب[۱]

تاریخ دریافت: ۱۳۸۸/۹/۲۲ تاریخ پذیرش: ۱۳۸۸/۱۱/۳

بیش از چهار دهه از زمانی که فرنک هول و کنت فلنری گزارش مقدماتی خود در خصوص پیدا نمودن محوطه های پارینه سنگی در زاگرس مرکزی را به چاپ رسانده اند می گذرد. از آن زمان تا کنون بررسی ها و کاوشهای متعددی در ناحیه مذکور انجام شده که نتایج برخی از آنان برخی داده های گزارش سال ۱۹٦۷ را به چالش کشیده اند. هدف عمده این مقاله به هیچ روی انتقاد از گزارش مذکور نبوده و تنها سعی بر این بوده است تا داده ها و یافته های جدید در آن گنجانیده شود. به‌عنوان نمونه نگارنده معتقد است که برخی محوطه هایی که در سال ۱۹٦۳ توسط هول و فلنری ثبت ولی هرگز معرفی نگشته بودند را توانسته در بررسی های مجدد خود و همکاران پیدا نماید. همچنین کشفیات اخیر در خصوص حضور تکنیک لوآلوآ حاکی از این است که برخلاف ادعای نویسندگان گزارش سال ۱۹٦۷، حضور این تکنیک در صنایع پارینه سنگی میانی زاگرس چشمگیر است.

واژگان کلیدی: موستری زاگرس، پارینه سنگی میانی، تکنیک لوآلوآ

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