Special Issue: Personal Ornaments in Early Prehistory

Humans' Earliest Personal Ornaments: An Introduction

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ABSTRACT

This is a special issue on personal ornaments in early prehistory. There are 12 contributions:

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- Bosch, M.D., Buck, L., and Strauss, A.: Location, Location, Location: Investigating Perforation Locations in *Tritia gibbosula* Shells at Ksâr 'Akil (Lebanon) Using Micro-CT Data
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- Rigaud, S., Costamagno, S., Pétillon, J.M., Charlard, P., Laroulandie, V., and Langlais, M.: Settlement Dynamic and Beadwork: New Insights on the Late Upper Paleolithic Craft Activities
- Laporte, L. and Dupont, C.: Personal Adornments and Objects of Ornamentation: Two Case Studies From Hunter-Gatherer Burials in France (La Vergne) and Argentina (Arroyo Seco II)
- Balme, J. and O'Connor, S.: Bead Making in Aboriginal Australia From the Deep Past to European Arrival: Materials, Methods, and Meanings
- Perlès, C.: Cultural Implications of Uniformity in Ornament Assemblages: Paleolithic and Mesolithic Ornaments from Franchthi Cave, Greece
- Borić, D. and Cristiani, E.: Taking Beads Seriously: Prehistoric Forager Ornamental Traditions in Southeastern Europe

This special issue is guest-edited by Daniella E. Bar-Yosef Mayer (Steinhardt Museum of Natural History and Institute of Archaeology, Tel Aviv University) and Marjolein D. Bosch (McDonald Institute for Archaeological Research, University of Cambridge). This is article #1 of 12.

INTRODUCTION

Personal ornamentation is one of the earliest known expressions of symbolic behavior. Symbolism, i.e., the ability to convey information within and across groups through material culture or behavior, is used to communicate specifics about the identity of both groups and individuals. In general, symbolically mediated behaviors enforce belief systems and their conventions are understood by people who are cued into certain social traditions (e.g., d'Errico and Stringer 2011; Kuhn 2014; Malafouris 2008; Vanhaeren and d'Errico 2006). The ability to think in an abstract manner is often linked to the development

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of modern human cognitive processes connected to social complexity and human-to-human interaction in emerging and developing social groups (e.g., Gamble 1998; Hodder 1977; Richerson and Boyd 2008). Their exclusively symbolic function makes personal ornaments ideally suited to study socially mediated behavior in past hunter-gatherer groups. As such, the role of beads and other personal ornaments in prehistoric societies has seen a tremendous increase in knowledge over the last fifteen years or so. This multidisciplinary field of knowledge comprises the study of taxonomy and taphonomy, symbolism and behavior, long distance contacts, and technological innovations. Personal ornaments, for example, have featured in debates concerning Neanderthal (e.g., Peresani et al. 2011; Radovčić et al. 2015; Zilhão et al. 2010) and modern human symbolic behavior (e.g., Bouzouggar et al. 2007; d'Errico et al. 2005; d'Errico et al. 2009; Henshilwood et al. 2004; Marean et al. 2007; McBrearty and Brooks 2000; Vanhaeren and d'Errico 2006), social networks (Álvarez Fernández and Jöris 2008; Bar-Yosef Mayer 1997; Gamble 1998; Kuhn et al. 2001; Lycett 2018; Rigaud et al. 2018; Shennan 2001; Vanhaeren and d'Errico 2006), and dispersal activity (d'Errico and Vanhaeren 2007; Hovers and Belfer-Cohen 2006; Klein 2008; Vanhaeren et al. 2004; Álvarez Fernández 2016).

In our workshop, "Humans' Earliest Personal Ornaments", that took place at the Steinhardt Museum of Natural History, Tel Aviv University, from 6–8 March 2017, we discussed the occurrence and the behavioral implications of beads, beadwork, and personal adornments in the prehistoric past all around the globe. Questions addressed during our workshop are reflected in the papers presented here. Our main questions were: What is the earliest evidence for personal ornaments in different regions? What are usable criteria for identifying symbolic activity? How can we identify the meaning and function of ochre and bead use, and specifically, what constitutes a shell bead? The discussion also centered on the best practice in shell bead and personal ornament research, and how to improve our ability to address broader-scale questions pertaining to the anthropology of socially mediated behavior within past human societies and their evolution. Many prehistoric studies rely to some extent on ethnographic analogies, and that was also the case in our studies. We would like to mention in particular the papers by Laporte and Dupont (2019), as well as Borić and Cristiani (2019). But in this special issue we chose to emphasize three overarching themes—production, distribution, and symbolism.

PRODUCTION: HOW TO IDENTIFY A PERSONAL ORNAMENT

Investigations into bead production are significant in instances of their earliest occurrence in a region. This allows one to study behavioral and social aspects of manufacture processes, while ascertaining their identity as ornamental objects. While modifications of some raw materials, such as ivory and antler, leave no question as to the ornamental nature of the objects, beach-collected shells are notoriously difficult, as natural perforations may have been used for suspension without the need for modification (e.g., Bar-Yosef Mayer 2014, 2015; Stiner et al. 2013; Vanhaeren et al. 2006). Evidence taken in favor of shell beads has included the mode of transportation, selective collection of certain species or specimens, the identification of intentional perforations, coloring by pigments or blackening by exposure to heat, traces of use-wear, and their archaeological context and distribution in time and space (e.g., Álvarez Fernández and Jöris 2008; Bar-Yosef Mayer et al. 2009; Bouzouggar et al. 2007; d'Errico et al. 1993; d'Errico et al. 2009; Henshilwood et al. 2004; Taborin 1993). For beach collected shells, comparison between natural death and archaeological assemblages has been used to investigate anthropogenic involvement (e.g., Vanhaeren et al. 2006).

In this special issue, Steele et al. (2019) provide a review of the African evidence for the use of shells for personal ornamentation. They draw attention to substantial variability in descriptions and identification criteria among their dataset and propose a best-practice towards presenting shell ornaments. However, they do find that the choice of species from Middle Stone Age sites in North Africa is consistent, as are patterns of use, and that they are comparable to slightly later assemblages from the Levant. Bosch et al. (2019) add to this by investigating how shell damage, in both natural and archaeological assemblages, relates to the shell's structure in *Tritia gibbosula.* Three-dimensional shell thickness models were derived from micro-CT scans as a proxy for structural resistance. They found that perforation across thin more fragile zones was random in natural assemblages, but preferentially situated in locations facilitating suspension among Early Upper Paleolithic assemblages at Ksâr 'Akil in Lebanon, suggesting that the latter were used as ornaments. At approximately the same time, Proto- and Early Aurignacian contexts from Fumane Cave in Italy yielded over 800 shells, some of which were directly dated. Peresani et al. (2019) found evidence for systematic bead manufacture at Fumane through use wear analysis of perforation edges and pigment residues on the shells. No clear differences were observed between the Proto- and Early Aurignacian assemblages, yet the bright red *Hemapoloma sanguineum* shell seems to have played a fundamental role in communication systems of the Fumane population. Red display by humans is also explored by Langley and O'Connor (2019) who carried out detailed analysis on pieces of red ochre found at sites associated with both ochre-stained shell ornaments and rock art in Timor-Leste. They find traces of use wear (e.g., grinding, scraping, and rubbing on the skin) on pieces of ochre starting as early as 42,000 years ago. In addition, they report on six stone implements displaying evidence of ochre processing. Langley and O'Connor's paper provides a millennial scale record of ochre use in Island Southeast Asia.

DISTRIBUTION: DIVERSITY AND CONTINUITY IN TIME AND SPACE

Distribution is a concept that portrays multiple stages in an ornament's life cycle, from entering the archaeological realm as raw material all the way through to its discard and

eventual discovery. Distribution in terms of landscape use and hunter-gatherer mobility was discussed from a variety of angles—long-distance raw material procurement and implications for contact between groups; manufacture locations and settlement dynamics; and, the role of shells and their distribution in burial contexts.

In her paper on Upper Paleolithic explorers, Bar-Yosef Mayer (2019) traces the geographic sources of shell beads. The Upper Paleolithic sites of Manot and Kebara Caves in Israel contain not only shells from the nearby Mediterranean, but also from the Red Sea and the Jordan Valley. The mosaic nature of raw material composition requires long-distance travel (>300 km) by people and/or shells across the Levant. This testifies to interactions between the Ahmarian and Aurignacian groups living "side-by-side" in the region at that time. Over in the western end of the Mediterranean, in the Iberian Peninsula, Álvarez Fernández et al. (2019) conducted an inclusive contextual study of personal ornaments of all raw-material types. On the basis of these ornaments, they divide the Iberian Magdalenian into five phases. Here too, shells move between the Mediterranean and Cantabrian regions, which points to the development of an exchange network within the Magdalenian culture. Rigaud et al. (2019) report on the exceptional Magdalenian site of Peyrazet in France, a site identified as a workshop where reindeer skins were modified and decorated. Marine shells along with teeth and skins were brought to this inland site to be processed. Evidence for the production and use of bone needles contextualizes these finds and suggests that Peyrazet was dedicated to crafting ornamental objects. From an inter-site perspective, this shows that ornament production had its own space in Upper Magdalenian forager settlement dynamics.

Taking a different route, Laporte and Dupont (2019) investigated spatial distributions of objects of ornamentation in two geographically distinct case studies of well-preserved late hunter-gatherer burial sites. Their research shows, in one case, that ornaments served as decorations of perishable objects placed in graves, and in the other, that decorated garments covered buried infants, but it is unclear whether or not they served them during their lives or were made especially as grave goods. The distinct geography of these two hunter-gatherer graveyards, namely Arroyo Seco II in Argentina and La Vergne in France highlights their similarities in contrast to a third case-study, Neolithic Germignac in France, where early farmers continuously modified shell objects thereby erasing the original shape of the shell.

SYMBOLISM: INTRINSIC VALUE OF RAW MATERIALS AND ORNAMENTS

All papers in this issue use an interpretive behavioral approach in one way or another, some focusing on ornament production and identifying socially mediated behaviors, and others showing how shells were used in both living populations and in burial contexts. Yet others look at raw material use, either tracking the mobility of shells within or between hunter-gatherer groups and social networks, or focusing on the intrinsic value of certain ornaments and raw materials. Balme and O'Connor (2019) studied diversity in Aboriginal Australian personal ornaments based on both museum specimens collected mostly in the 19th century and on archaeological materials. Importantly, the use of ornaments made of perishable plant materials, usually not found in the archaeological record, was demonstrated. The selection of animal species used in bead making in Aboriginal Australia investigates properties of raw materials and human relationships to animals. Mollusks with iridescent shells ("mother of pearl"), for example, were selected over less colorful ones. Dingo teeth were generally avoided although they were as readily available as the commonly used macropod teeth. Balme and O'Connor (2019) suggest the latter is indicative of a high status of dogs in Aboriginal societies. The more recent museum specimens show great similarities to the prehistoric past and suggesting long-term consistency in raw material choices over thousands of years. The continuous repeated use of a small selection of shell species also was demonstrated by Perlès (2019) who studied the long sequence of Franchthi Cave in Greece, spanning from the earliest Upper Paleolithic to the final Mesolithic. Her results show that despite a wealth of readily available marine mollusk taxa, only a small number of species were selected. The conservative nature of the ornamental shell assemblage continues despite changes in the status and function of the site which are evident from diachronic changes in faunal exploitation, lithic types, and cultural affiliations (e.g., Aurignacian, Gravettian, and Mesolithic). Borić and Crisiani (2019) similarly argue the transmission of knowledge through generations on the basis of the persistent presence of locally sourced fish pharyngeal teeth from the Mesolithic through the Neolithic in the Danube Gorges. Furthermore, they report on the transport of *Columbella* shells over 400km, attesting to exchange networks from the Mediterranean coast to the Balkan inlands.

CONCLUSIONS

The different approaches to the study of the earliest ornament assemblages, expressed in this special issue, reflect different attitudes in the study and interpretation of our prehistoric past. The study of lithics, for example, including their typology, technology, and use wear, has been ongoing for over 100 years. However, the same intense approach to personal ornaments is at its beginning. The comparison between lithic assemblages as reflecting human groups at various organizational levels, that allows us to determine culture, apparently can also be done using ornaments. Yet we do see, that at least in some sites and possibly regions, the use of ornaments is rather conservative and continuous across time and space. An important point made in the general discussion of our workshop, more difficult to tackle, is the question of whether the repetitive nature of some shell species is a result of availability on the seashores, or whether they mirror a conscious choice. Because the LGM shorelines are now submerged, their investigation, at the moment, is not possible. On occasion, beads and other ornaments are found as isolated finds, and, in those cases,

their archaeological context might help us in their symbolic interpretation. These ornaments thus reflect not only a specific culture, but also patterns of cultural transmission within and between groups, and the challenge of the archaeologist is to reconcile the results from lithics, as well as other material culture, with that of personal ornaments.

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