

und Geologie auch die Hydrologie des Arbeitsgebietes als Basis einer Bodentypenkarte zur Vegetationskartierung erstellt wurde. Die Karte liegt dem Buch in digitaler Form auf einer CD-ROM bei. Der ‚geologische Abschnitt‘ schließt mit „Spätglaziale Gletschervorstöße im Fotschertal“, wodurch der Leser dank eines immer feineren Fokus‘ nun mit den lokalen Begebenheiten vertraut ist. Auf den ersten ca. 100 Seiten wird so bereits ein umfangreicher Überblick der lokalen Geologie, Geomorphologie, Glaziologie und Geohydrologie des Fotschertals und seiner Umgebung geliefert.

Der zweite Abschnitt dient der Vorstellung der Grabung und ihrer Befunde. Hier werden erst pedologische Befunde und Ergebnisse vorgestellt, bevor auf naturwissenschaftliche Analysen eingegangen wird. Ein Artikel dieses Teils setzt sich mit der rezenten Vegetation auseinander, da die Rekonstruktion der prähistorischen Vegetation anhand von Pollenanalysen aus Ermangelung entsprechender Erhaltungsbedingungen nicht durchführbar war. Ein direkter Zusammenhang zu den Ausgrabungsergebnissen wird hier nicht deutlich, weswegen dieser Artikel meines Erachtens an einer Position weiter vorne im Buch besser platziert gewesen wäre, um zu dem Allgemeinbild der Situation beizutragen. Die Analyse der Holzkohlen aus drei Feuerstellen lieferte als einzige vegetabile Quelle Hinweise auf den Baumbestand zur Besiedlungszeit. Anschließend folgt ein Artikel zu möglichen Fernverbindungen während des Mesolithikums, bevor die eigentliche Grabung vorgestellt wird. Hier werden neben grabungstechnischen Aspekten ausführlich die Befunde beschrieben und deren Genese diskutiert. Zudem wird die stratigraphische Lage der Artefakte, wie auch deren Rohmaterialherkunft analysiert, um abschließend einen Ausblick auf weitere Untersuchungen zu geben, wobei jedoch bereits erste Analysen des Gerätespektrums vorgestellt und in Bezug zu den Befunden gesetzt werden.

Dem mit 104 Seiten längsten Artikel folgt der Bericht der reich bebilderten Gebrauchsspuren-Analyse an 252 Artefakten, welcher durch eine tiefer gehende Besprechung der räumlichen Gliederung des Lagerplatzes abgerundet wird. Einen Wermutstropfen der Grabungspräsentation stellen leider die Grafiken dar, denn so sehr diese dem Verständnis dienen, sind besonders die Planumszeichnungen häufig stark überladen, sodass ihr Inhalt teilweise schwer zu erfassen ist. Eine farbliche und symbolische Reduzierung hätte dem Leser in diesem Fall das Überschauen der jeweils dargestellten Informationen deutlich erleichtert.

Den (thematisch) dritten Teil bilden insgesamt vier Artikel, die sich allesamt mit verschiedenen Rohmaterialien und deren Provenienz auseinandersetzen. Sie liefern somit eine gute Rückführung auf die eingangs gelieferten Einführungen zur Geologie und Geomorphologie. In dem letzten Artikel des Buches

ergreift noch einmal der Herausgeber das Wort und fasst alle Artikel zusammen, wobei auch ein (vorläufiges) Fazit zu dem Projekt geliefert wird. Die Einsicht, dass „nicht jeder Leserin und jedem Leser sofort die inhaltlichen Bezüge zwischen den jeweils zu Worte kommenden Beiträgen deutlich vor Augen erscheinen“ (S. 548), liegt offen auf der Hand. So spannend und interessant die einzelnen Artikel auch sind, der unmittelbare Zusammenhang mit dem Projekt Ullafelsen scheint teilweise konstruiert, vor allem, wenn nur im Fazit einzelner Beiträge mit ein paar Worten auf das Projekt Bezug genommen wird, sodass es vermutlich zweckmäßiger gewesen wäre, diesen Epilog den Beiträgen vorzuschalten, um einen sanfteren Einstieg in die Lektüre zu liefern. Der gelungenen illustrativen Absicht des Bandes wird am Ende des Buches mit 17 „Impressionen aus dem Fotschertal“ gefolgt, die Fotos der Untersuchungen und Landschaft zeigen.

Insgesamt bietet der erste Band der Reihe „Mensch und Umwelt im Holozän Tirols“ einen umfassenden Einblick in die spannenden Fragen der alpinen Geoarchäologie. Durch die interdisziplinäre Verknüpfung unterschiedlicher Forschungsrichtungen kommen weder Umwelt noch Mensch in der Betrachtung zu kurz. Die abschließende Fundvorlage zum Mesolithikum-Projekt Ullafelsen steht zwar noch aus, da der Leser bereits jetzt einen umfangreichen Einblick in das Projekt erhält, ist dies jedoch keinesfalls als Negativpunkt zu werten. Dass die Reihe einen wesentlichen Einfluss auf die alpine Archäologie haben wird, steht ohnehin außer Frage.

## The Magdalenian Household. Unraveling Domesticity

Ezra B. W. Zubrow, Françoise Audouze & James G. Enloe (Eds.), *The Institute for European and Mediterranean Archaeology, Distinguished Monograph Series, State University of New York Press, 2010, 335 pages, Paperback, € 29.98, ISBN 978 1 4384 3366 0*

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This bilingual (Eng.-Fr.) edited volume, the result of a conference held at Marcoux (France) in 2005, centres around the mind-broadening theme of domestic organization during the Upper Palaeolithic Magdalenian. Domesticity is considered to be the basic component of society and defined as „the processes that make up the creation and sustaining of the household“ (p. 1). Technology, space, and social organization are seen as useful pathways to explore

this aspect of prehistoric human behaviour. Essential characteristics of the household are its functional and spatial constraints. Intra- and intersite analyses of the spatial organization hidden in our archaeological record are thus considered to be a possible and useful entry for the study of domesticity and household in the past. In hunter-gatherer societies the hearth is thought to play a universal and central role in the organization of domestic space and is therefore considered to be one of the best indicators for analysing prehistoric domesticity and social organization.

The volume consists of 18 contributions organized in a threefold structure, focussing on 'technology and demography' and 'social organization' in both archaeological (parts 1 & 2) and ethnographic (part 3) contexts. In addition, a general introduction and concluding thoughts by the editors as well as an English-French index are included. All of the contributors to this volume refer to one or more well-known high-resolution dataset(s) from the Paris basin or Switzerland, each addressing prehistoric domestic organization from a different perspective and building their arguments around previously well-published data from these archaeological sites. The high-resolution character of these datasets refers not only to the exceptional organic, stratigraphic and/or spatial preservation conditions of these important sites, which often contain well-preserved remains of structural hearths. It equally refers to the long-term, detailed and multidisciplinary excavation and post-excavation approaches to which these sites have been subjected.

As the primary focus in seven papers, including some new and hitherto unpublished results, Verberie Le Buisson Campin (level II-1) holds a special position. All the contributions on this site centre around a number of highly debated questions including the site's function and its relation to the regional settlement patterns, but also concerning the (spatial) division of labour and the composition, gender and age of the group(s) who inhabited this site. In this regard, these contributions all address the archaeological visibility of social and economic organizational structures related to prehistoric hunter-gatherers (residential < > logistical mobility; foraging < > collecting). Apart from a short introduction of the site by Enloe & Audouze and a lengthy summary discussion of the spatial and social organization by Audouze based on a comprehensive comparison of the other contributions, each of the other papers on Verberie focus on one specific aspect, including faunal remains (Enloe), flint technology (Janny), bone tools (Averbouh), non-flint rocks and structural hearths (Dumarçay & Caron), and global and local spatial patterns in the distribution of the flint and/or faunal remains using GIS techniques (Keeler). Enloe & Audouze provide us some information on the stratigraphic and spatial organisation of this site. In addition to previously published landmark papers on these

primordial issues (i.e. Audouze & Enloe 1997; Enloe 2006), their paper, as well as Enloe's paper on the faunal remains, includes a short, but very useful and important discussion on the stratigraphic integrity and some post-depositional disturbances of the site. Two geomorphological units are distinguished in association with the archaeological remains: the first is a dark brown Holocene (plow-) topsoil including reworked Upper Palaeolithic material amongst more recent archaeological remains; this soil horizon covers Pleistocene fluvial sand deposits (level II) almost entirely homogenised by bioturbation processes. Based on the distribution of the lithic and organic materials, including high- and low density as well as areas devoid of any archaeological remains, currently eight Magdalenian living floors are distinguished in this second geomorphological level, six of which include well-preserved remains of one or two hearth structures. From such taphonomic discussions it becomes clear that a stratigraphic separation and delineation of the superimposed living floors in this complex multi-layered site is not always as straightforward as one would like it to be. Furthermore, and despite the presence of well-preserved structural features, post-depositional site formation processes still have to be taken into account as well. Based on his many years' study of the faunal assemblages from Verberie and Pincevent, Enloe in his paper makes a strong case for the interpretation of Verberie as a location for the initial acquisition and carcass processing of mainly reindeer. To reach this conclusion he takes into account the represented faunal spectrum (i.e. number, species, sex, age, etc.), seasonality indicators, body part representation, in situ articulation and refitting of carcass portions, the presence and location of cut marks as well as taphonomic issues. In a next paper, Janny gives us an overview of the variability in the flint assemblages from level II-1. Based on refit data and technological reading of the individual artefacts she studies aspects of raw material procurement, core reduction and tool production processes, with a special interest given to the subject of skill transmission and competence levels. Janny recognizes different levels of competence in the flint material, ranging from „autonomous unproductive knapping“ by young and novice flintknappers to „outstanding knapping“ by experts, implying the presence of children and nuclear families. Averbouh informs us on the artefacts in bone, reindeer antler and mammoth ivory recovered from levels II-1 to II-4. These include at least 20 (fragments of) different tools (i.e. projectile points, needles, sticks, a pierced baton, etc.) as well as some manufacturing debris. Although no sound inferences on the social organization and/or nature of the sites could be made based on this organic evidence alone, a macroscopic study of wear traces allowed Averbouh to infer several activities, related to hunting, sewing, the transformation of fibers or weaving and the manufacturing of antler and ivory

tools. In their contribution Dumarçay & Caron give us a brief overview of the (heated) non-flint lithic materials and the two structural hearths from level II-1 and also from hearth Y127 of Pincevent-Section 44 (level IV-0), comparing these with similar remains from Pincevent previously studied by others. In their comparative overview they focus on different aspects of the raw materials (i.e. origin, distance, accessibility, abundance, nature, quality, morphology, sizes, etc.) as well as their differential uses as seats, boiling stones and structural elements of hearths and the management and discarding processes related to these stones. Keeler attempts to identify, delineate and visualize intrasite spatial patterns in the distribution of the flint and/or faunal remains of level II-1, both on a global as well as on local scales. His multi-scale approach is essentially based on the technique of Kernel Density Estimates, in combination with some of the refit data as well as a large set of assumptions on hearth-centred site structure and human behaviour. He is able to distinguish four individual spatial 'habitation' units within the (excavated part of) this level: two hearth areas flanked by two dump areas. Each of these is subsequently studied on a more detailed local scale, as are the low-density zones outside the main occupation and refuse areas, to reveal individual activity areas. These individual activity areas are then considered in more detail by Audouze in her summary paper.

Next to the extensively treated level II-1 of Verberie, the issue of Upper Palaeolithic domestic and social organization is further explored in different overviews devoted to a number of other Magdalenian sites from the Paris Basin (Pincevent, Etiolles) and Switzerland (Champréveres, Monruz), as well as for the Azilian and Bellosian site of le Closeau, equally situated in the Paris basin. Based on a spatial and technological analysis of lithic refits, and a set of diagnostic criteria, Pigeot discusses differences in flintknapping competences for the units U5 and Q31 of Etiolles. Still one of the most convincing examples available in the archaeological literature so far, the observed (spatial) variability in lithic technology is convincingly attributed to prehistoric actors of different competences (novice, apprentice, expert) and subsequently linked with different ages (children, teenagers, adults) and/or sexes (male, female). In her paper Cattin compares the Swiss Magdalenian sites of Champréveyres and Monruz and touches upon similar sex and age related topics of social organization as reflected in lithic technology. Focusing, among other aspects, on lithic raw material variability she points to similarities and differences between both sites regarding period and duration of occupation, site function and activities performed. In contrast to Pigeot's observations and inferences at Etiolles, Cattin concludes that in both Swiss sites there is no clear evidence of spatial organization associated with technical competence and/or gender. Bodu

introduces a more diachronic perspective in his discussion on prehistoric social organization by comparing the Magdalenian site of Pincevent IV-20 with the numerous Azilian and to a lesser extent also Bellosian artefact concentrations of the extensive site of le Closeau. Despite major differences in climate, fauna, flora and human behaviour, he recognizes clear resemblances in the organization of the living space between Magdalenian and Early Azilian times, in contrast to the later Azilian and Bellosian. Zubrow chooses the different path of theoretical considerations and model-building to investigate the issue of sharing and the meaning and creation of (in-)equality in the Magdalenian sites of Pincevent and Verberie.

In the final part several ethnoarchaeological observations are presented as a source of information to help with the interpretation of the Magdalenian record of the Paris basin. Using a cross-cultural study on sexual division of labor, in combination with the results of microwear analyses on 37 scrapers from Verberie Level II-1, Keeley addresses the question of the role of women in Magdalenian reindeer hide working. He uses several arguments to argue for their presence at Verberie and their dominant involvement in hide working activities. In addition to Keeley's contribution, Beyries & Rots in their paper equally focus on hide working, more specifically on the influence of hafting types and gestures, also using a combination of comparative ethnographic and microwear approaches. Soffer & Adovasio on their part discuss the role of plant-based technologies (textile, basketry, etc.) during Upper Palaeolithic times. Based on ethnographic observations they not only note the importance of these technologies in the material culture of hunter-gatherers, but also point towards their association with women, children and older individuals. Citing several examples of direct and indirect archaeological indicators of plant-based technologies, they stress the importance of adequate recovery techniques (flotation) and training for the recognition of these perishable remains. Relying on first-hand observations among several Siberian hunter-gatherer populations, David, Karlin & D'lachenko present their ethnoarchaeological data on the observed variability in practises of hunting, butchering, processing, curing and consumption of wild and domestic reindeer.

Overall, this volume is full of thought-provoking information. Therefore it is somewhat unfortunate that this rich content is not entirely reflected in the formal aspects of the book. At first sight the general lay-out of this paperback looks quite nice, but upon a closer scrutiny it suffers from (too) many mistakes, ranging from numerous typing errors, a low resolution and limited readability of some of the illustrations and inconsistencies in references and abstracts.

Notwithstanding this somewhat formal sloppiness, this volume succeeds well in a difficult task of bringing arduous issues under our attention. It is

obvious that social aspects of prehistoric human behaviour (i.e. gender, age, social status, labour division, skill transmission, etc.) are difficult to infer from the archaeological record, and often remain controversial, despite being a subject of utmost importance. Focussing on an exceptionally preserved and well-studied Magdalenian record, it also offers an important framework for similar studies of less well preserved prehistoric contexts, which form the bulk of our known archaeological record. Being mostly lithic sites situated in non-stratified deposits, these contexts have an overall poor resolution in terms of stratigraphic and organic preservation. Absolute dating of these sites remains problematic, as is also shown to be the case with the well-preserved Magdalenian record. This means that the omnipresence of potential complex palimpsest situations, implying severe problems of homogeneity, integrity and functionality, always has to be taken into account, not only for the larger and/or more dense artefact concentrations but also for the smaller and/or less dense artefact assemblages, unless proven otherwise.

Reliable inferences on the complex formation processes of our archaeological sites, in order to adequately understand (social aspects of) prehistoric human behaviour, is only possible by reasoning along multiple lines of direct and indirect evidence, as is convincingly shown in this volume. The importance of developing adapted research designs characterised by the application of a wide variety of analytical approaches (including bone and/or lithic refitting, microwear, radiometric dating, etc.) should deserve our primary attention. Based on our current knowledge, an integrated intra- and intersite approach seems to be one of our best options, including detailed studies of entire artefact assemblages and taking into account different spatial and temporal scales with a specific focus on technological, functional, spatial and contextual characteristics of the remains. Furthermore, the spatial and temporal relationships between separate artefact clusters, as well as the (still too often neglected) low density areas and 'empty' zones should be included in our research programs. Detailed, consistent and large-scale excavations beyond the boundaries of individual artefact clusters are obviously an absolute prerequisite.

The goal of studying prehistoric human behaviour is difficult to achieve, not only due to the complexity of that behaviour, but also our archaeological record being an imperfect reflection of it. This complexity, together with the ambiguities of our archaeological datasets and our limited knowledge, require that archaeologists recognize the provisional nature of their claims and continue to develop and evaluate robust methodological and theoretical frameworks. This volume demonstrates clearly that there will always be more questions than answers when studying social aspects of past human behaviour, but also that a multidisciplinary approach is a prerequisite to gain at

least some insights into these important aspects of human behaviour.

#### Literature cited

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### From technology to tradition – Re-evaluating the Hamburgian-Magdalenian relationship.

Mara-Julia Weber

**Untersuchungen und Materialien zur Steinzeit in Schleswig-Holstein und im Ostseeraum 5. Wachholtz Verlag, Neumünster 2012, 252 Seiten, Paperback, 50,00 € ISBN 978 3 529 01857 2**

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Nach dem Höhepunkt der letzten Kaltzeit vor etwa 25 000 Jahren (LGM) wurden viele Regionen in Mitteleuropa erneut vom Menschen besiedelt. Dies war eine logische Folge der sich nun wieder erhöhenden Biomassenproduktion, wodurch es Tierherden – und damit auch bald dem Menschen – wieder permanent ermöglicht wurde, die ehemalige Frostschuttüste zwischen dem alpinen und dem nordeuropäischen Eisschild zu nutzen. Wie diese Prozesse der erneuten Ausweitung der menschlichen Ökumene genau abliefen, wo die Menschen herkamen und wann Kommunikationsräume sich erneut etablierten, ist auch für diesen Fall im Detail schwierig zu ergründen.

Eine gewisse Zeit nach dem LGM breitete sich nördlich der Alpen von (offenbar) Südwestfrankreich her das Magdalénien, die klassische spätjungpaläolithische „Jägerkultur“, relativ rasch nach Osten bis nach Polen hinein aus. Diese Ausbreitung sparte das Nordeuropäische Tiefland jedoch weitgehend aus. Erst gegen Ende des Magdaléniens, als lithische Geschosspitzen nach und nach die Steinartefaktinventare ergänzten (was möglicherweise auf eine geänderte Jagdbewaffnung zurückzuführen ist), dehnte sich der Siedlungsraum auch nach Norden aus. In dieser Konsequenz wurde frühestens ab etwa 13 ka calBC auch das damals aufgrund des abgesenkten Meeresspiegels noch mit dem Festland verbundene England wieder besiedelt. Dieses zumeist als Creswellian bezeichnete Phänomen wird heute von britischen Kolleginnen und Kollegen nicht selten „Magdalenian“ tituiert (Jacobi & Higham 2011), sind