

grundlegend sein für die 1) Analyse lithischer Inventare der Hamburger Kultur und 2) für Fragen nach dem Verhältnis zwischen Hamburger Kultur und jüngerem Magdalénien.

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El Mirón Cave, Cantabrian Spain. The site and its Holocene archaeological environment.

Lawrence Straus & Manuel González Morales (eds.)
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Iberian Archaeology, possibly like in many other countries, is marked by a diversity of groups of professional archaeologists. Palaeolithic and Neolithic experts don't always work together, while Mesolithic topics are frequently divided between both groups with completely different perspectives: for those interested in the Pleistocene, Mesolithic is the tail end of their interests, while for those working with food producing societies, the last hunter-gatherers are

studied only to understand the transitional phenomenon of agriculture and domestication – in fact, there are, unfortunately, very few people that focus primarily on the Mesolithic in Iberia.

Those studying Bronze Age societies are entirely a different crowd, frequently starting with the Chalcolithic to understand the technological, economical, social and political trends that lead to complex societies in Iberia. Most likely, this is partially due to the fact that methodology and theory employed by Iberian archaeologists are different in those various time slices of our past, but mostly because there are rare archaeological sites excavated recently that cover a long diachrony from Pleistocene to Middle Holocene times, in which the Upper Palaeolithic, Mesolithic, Neolithic, Chalcolithic and Bronze age are present and marked by good site preservation.

El Mirón broke with the traditional status of prehistoric research in Iberia. Firstly, because the site itself provided one of the longest sequences (in cultural terms and not necessarily in chronological boundaries) in Iberia, with human occupations starting at least in Middle Palaeolithic times and ending in present times, with very important late Upper Palaeolithic, Mesolithic, Neolithic, Chalcolithic and Bronze Age human occupations, perhaps rivalling with such caves as El Castillo, also in Cantabria, or Gorham's Cave in Gibraltar. Secondly because Lawrence Straus and Manuel González Morales put together an incredible and diverse team, bringing together a wide range of experts: it includes specialists that individually focus on all those periods of the human past and, at the same time, possess a specific archaeological expertise. The result is a unique monograph for Iberian Prehistory, in English, with twenty chapters, more than 470 pages illustrated by almost 200 colour and black and white figures and close to 140 tables.

The El Mirón monograph could have been divided in four main parts: the first, covering site description, stratigraphy, and chronology, includes chapters 1 through 7; the second part focus on the palaeobotanical reconstruction with chapters 8, 9, 10 and 11; the third part deals with the palaeozoology of the cave with 5 chapters (12-16); and the final section covering the material aspects of the site, with three chapters, respectively, on features, stone tools, and ceramics.

The prologue and Chapter 1 give a very interesting highly historic perspective of El Mirón cave. Clearly, Straus and González Morales set their pace on the introduction of the monograph with an unequivocal position of theoretical and methodological honesty (that sometimes can be thought to be naivety), extremely rare in the contemporaneous world of Archaeology. The whole volume, including the chapters written by the two editors as well as the other chapters written by the other experts (of which many were translated by Lawrence Straus), is marked by a distinctive preoccupation by the methodological

affairs employed to recover data at El Mirón. It is very interesting to see that along the way, the excavators changed and adapted the excavation methodology and strategy, both to new technologies and to the contextual circumstances of the site and to each of its geological layers and archaeological horizons. Though this is the normal thing to happen for those who excavate a site for over a decade, it is very rare to state so in the publications that result from that work. Straus and González Morales do it in a highly detailed fashion in those few chapters. This can be seen in chapters 1 (The excavation of El Mirón Cave), 3 (El Mirón cave) and 4 (The stratigraphy of El Mirón cave). Particularly in the latter, the comprehensive and meticulous description of the method utilized to describe the stratigraphy is extremely enlightening and explains the quality of the results published in the following chapters of the monograph. Of course, the general complexity of a cave was in the case of El Mirón severely augmented due to the modern activities that took place in the interior space of the cave.

Chapter 5 on the cave sedimentology, by William Farrand, not present among us anymore, shows the quality of his geoarchaeological research, that, at least for some of us, represents the quintessential of the relation between Earth Sciences and Archaeology, seen for the first time in the brilliant pioneer work carried out by Farrand in Abri Pataud in the French Dordogne (Movius 1977).

The cave chronology is presented in Chapters 5 and 6, respectively dedicated to Radiocarbon and Archaeomagnetic results. The latter provides one of the few examples of the application of archaeomagnetic technique to Archaeology in Iberia, still with limited results dating only from the Neolithic to the Bronze Age horizons. Based on Radiocarbon chronology El Mirón is likely the best dated site in all of Iberia and most likely also one of the better dated in Europe. Straus and González Morales were able to provide us with as many as 76, conventional and AMS, dates. Although there are a few inconsistencies and anomalies among the results (noted and commented by the excavators), the general pattern is one of a great regularity with high quality results providing a clear chronological control for the cave and its long archaeological sequence. Perhaps one of the two less positive aspects of the volume is the inconsistent use of dating results: the dates are frequently presented in BP, Cal BP or cal BC/AD. It would have been easier for the reader if the dates in the text were all presented in the same form. The other less positive aspect is that some chapters were written without taking into the account that they were part of a monograph – the result is that the beginning of various chapters describes the cave and its context, repeating needlessly what was the detailed focus on the early chapters of the volume.

It is a relevant fact that the data from chapters 8 (pollens by Iriarte Chapusso), 9 (phytoliths by Zurro),

10 (plant remains by Peña-Chocarro), and 11 (charcoal by Zapata) indicate pretty much the same patterns of a fluctuating plant cover from more arboreal cover of Atlantic forests (Mesolithic and Neolithic level 9) to more open vegetation (late Neolithic and Bronze Age) possibly because of anthropogenic impact with forest clearance due to agropastoral activities, including burning and use of tree foliage for livestock fodder. Of particular interest is the presence of domesticated cereal since early Neolithic times with increasing importance through time. Another noteworthy aspect was the use of acorns and hazelnuts during the Neolithic.

The faunal record (Chapter 12-16) is varied, though within the expected diversity for the different phases. It is interesting, however, that among the ungulates (Chapter 15 by Pérez Ripoll and López Gila and chapter 16 by Altuna and Nariezkuna), the red deer is the most common species, both before and after the introduction of domesticates. Nevertheless, there is evidence in El Mirón for the decline of hunting starting with the Neolithic.

The birds (chapter 13 by M. Elorza) and the herpetological data (chapter 14 by Sanchiz et al.) seem, in general, to confirm the environmental tendencies seen in the palaeobotanical results, with cyclical variations in temperatures, humidity and in the intensity of the vegetation cover around the site. Micromammals (Chapter 12 by Cuenca-Bescós and García Pimienta) provided the most detailed information on the local and regional environment, still pretty much confirming the general scenario given by both the botanical and the other zoological data from El Mirón.

Chapter 17, authored by Straus and González Morales, describe in detail the large number of features, including pits of various sizes and natures, as well as chronologies, from the Neolithic to the Bronze/Iron Age. Other features found in El Mirón are post-holes, rock piles, and hearths. The methodological description in the beginning of the chapter is, again, one of the interesting aspects of this chapter, following the clear openness of the authors.

The stone tool assemblages (chapter 18) were described by the two editors and Rissetto, a young scholar from UNM. The chapter describes in detail the raw materials, the flint sources, the technology and typology of the various lithic assemblages. The same general perspective was presented for the ceramics, that is, raw material, technology and typology, as well as spatial distribution, were described by Maeso in a highly detailed form in chapter 19, closing the section on archaeological materials from the Holocene context of El Mirón.

All material analyses helped, together with the faunal and botanical data, to put together a general perspective of what the human occupations were and the various activities that took place in each phase and area of the cave. And this, of course, was the topic of the last chapter written by Straus and González Morales.

The volume is, needless to say, of great quality and irreplaceable, more so for English speakers. Those readers that know the monographic (and other) publishing record of Lawrence Straus, either alone or in collaboration (e.g., La Riera, Abruz Dufaure, Le Trou Magrite, l'Abri du Pape, Grotte du Bois Laiterie), could not expect any less, more so now with Manolo González Morales with a long history of important Palaeolithic and Mesolithic excavations in Cantabria.

It seems clear that this volume followed a central idea, explicitly forwarded by Straus and González Morales at different places in the book: that this volume is the history of a long term dynamic process with a particular objective in mind – that of the longue durée. This is a concept borrowed from Fernand Braudel a historian devoted to the Mediterranean world from the 1950's. The longue durée is a concept born out of the French Annales School of historical thought that views as important aspect of the historical processes that of the long term structures instead of the short term events, favoured by so many archaeologists and historians alike. Naturally, in this case, the long term structure is the cave of El Mirón itself, as both a natural and anthropogenic feature that lasted 2000 generations of humans.

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Rydno. A Stone Age Red Ochre Quarry and Socioeconomic Center: A Century of Research.

Romuald Schild, Halina Królik, Andrzej Jacek Tomaszewski, Elżbieta Ciepielewska. With contributions by Jan Fiedorczuk † and Zdzisław Hensel. Institute of Archaeology and Ethnology of the Polish Academy of Sciences. Warszawa 2011, 467 Seiten, Hardcover, 120,00 Złoty.
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Vielleicht war es eine Art Rötel-El Dorado der Urgeschichte Europas. 172 Fundkonzentrationen auf drei Quadratkilometern vom Spätpaläolithikum bis in die Frühe Bronzezeit sprechen jedenfalls für seine

starke Anziehungskraft. Das unter dem Namen Rydno bekannte Fundkomplexareal ist aufgrund des natürlichen Vorkommens von hämatithaltigen Mineralgemengen einer der bedeutendsten prähistorischen Fundplätze Europas. Solche Mineralgemenge werden in archäologischem Kontext auch als „Rötel“ oder „roter Ocker“ bezeichnet.

Seit den ersten systematischen Untersuchungen im Jahre 1923 durch Ludwik Sawicki sind etliche Oberflächenfunde gesammelt und mehrere Grabungskampagnen durchgeführt worden. In dem zu besprechenden Buch liegen nun erstmals eine Zusammenfassung der Forschungsergebnisse sowie eine Beschreibung der Fundplätze vor.

Das Werk behandelt die Geschichte, die Geomorphologie, die räumliche Verteilung, die kulturelle Taxonomie und die wesentlichen Inventarlisten der Funde und Orte seiner 100jährigen Forschungsgeschichte. Außerdem werden die Eigentumsfrage der Mine, die sozio-topographische und sozioökonomische Bedeutung des Gebietes und das Verhältnis zu den nahe gelegenen Silexminen beleuchtet.

Die 467 Seiten des in englischer Sprache verfassten Buches gliedern sich in elf Kapitel, denen ein naturwissenschaftlicher Beitrag von Zdzisław Hensel angefügt ist. Dank des Hardcover-Einbandes und der Fadenbindung macht es einen hochwertigen Eindruck, dem auch häufiger Gebrauch nichts anhaben dürfte. Weiter ist es mit 86 ansprechenden Abbildungen und 22 Tabellen versehen.

Im einführenden **ersten** Kapitel wird unter anderem die geographische Lage des Gebietes erläutert, das sich im südöstlichen Teil Polens am Oberlauf des Kamienna-Flusses im nordöstlichen Vorland des Mittelgebirges Świętokrzyskie (Heiligkreuzgebirge) in der Woiwodschaft Świętokrzyskie befindet. Begrenzt wird es von den Ortschaften Skarżysko-Kamienna, Grzybowa Góra, Nowy Młyn und Michałów-Piaska. Zudem erfährt man, dass der Name dieses Fundkomplexareals – Rydno – aus dem Fantasiennamen Rydzno entstand, den Stefan Krukowski in den 1950er-Jahren kreierte. Im Polnischen hat der Name keine bestimmte Bedeutung. Lediglich die Worte „rudy“ (rot) und „rydz“ (rote Pilzart) finden darin Verwendung und sind wohl auf die Rotfärbungen der Rötelminen bezogen.

Forschungsgeschichtliches wird im **zweiten** Kapitel dargelegt. Um 1910 fanden die beiden Gymnasiasten Jan Samsonowicz und Jan Czarnocki lithische Artefakte bei Piaska (Nowy Młyn – Nad Piaską). Erste systematische Untersuchungen führten Irena und Ludwik Samicki von 1923 bis 1925 durch. Die Fundplätze werden kurz vorgestellt und der Verbleib von Akten und Funden ergänzt sowie zahlreiche Fundzeichnungen abgebildet.

Von vielen Ausgrabungen und Oberflächenbegehung der 1930er- bis 1960er-Jahre wird berichtet, welche nach einer längeren archäologischen Pause bis 1975 wieder aufgenommen und bis 2011