

early examples of carburization in the existing literature. She concludes that “While it is theoretically possible to achieve a requisite CO/CO₂ ratio in an open fuel bed to carburize an iron object of some thickness, it is unlikely to have been the method by which carbon found its way into most early steel objects” (p. 29, n. 115). But she has no other possibility to suggest. Moreover, on several occasions, she seems willing to admit that such carburization could take place. So, on p. 24, n. 74, she states that “an hour’s duration in the smithing fire at a temperature of 940°C would have resulted in a 0.3 mm depth of carburization at a carbon level of about 0.75%.” That seems to me to be in keeping with what all other scholars have said about this process. Again, on p. 28, n. 110, she says that, using the process described above, “Carburisation in this manner would require a long spell in the forge fire to achieve a hypereutectoid core. For example at a forge hearth temperature of 940°C, 0.8% carbon content would be possible only at a depth of 0.6 mm after 4 hours.” To my knowledge, no one has ever claimed anything to the contrary. The carburization was only on the surface of the artifact, with minimal penetration into the interior. That is why it is best to speak of ancient steeled artifacts, as Tylecote is careful to do, because steel is a homogeneous product.

At this point the attentive reader will surely ask, what is going on? McConchie seems to accept in her footnotes what she rejects in her text. I have gone into this in some detail because I want to make clear that this is an important, very impressive book, one that is likely to become a standard reference work in the field of early iron metallurgy. It is also a book with serious ambiguities and apparent contradictions. I really do not know what to make of this volume; I have never seen anything quite like it.

James Muhly

University of Pennsylvania
jimuhly@yahoo.com

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***The Site of the Dead Sea Scrolls: Archaeological Interpretations and Debates: Proceedings of a Conference Held at Brown University, November 17–19, 2002*, edited by Katharina Galor, Jean-Baptiste Humbert, and Jürgen Zangenberg. Studies on the Texts of the Desert of Judah, Volume 57. Leiden: Brill, 2006. x + 308 pp. 127 figures, 10 tables. Cloth. \$147.00.**

This Qumran archaeology conference, which I attended, offered lively disagreements. A few key scholars were ab-

sent, but the assembly was diverse. This book gives some new information and continuing disagreements. This review will list the contents and comment as space allows.

After a foreword by John J. Collins, Katharina Galor and Jürgen Zangenberg offer “Qumran Archaeology in Search of a Consensus.” They were good hosts, but some assertions in this introduction could well be read with a grain of Dead Sea salt. On page 1: “None of the conference participants would want to artificially separate the Qumran texts from their archaeological context or vice versa.” Let each reader decide. Page 2: “In the late 1980s and early 1990s . . . the first dissenting voices were raised about the Essene character of the site.” This is false: few subjects have been as perennially contested as Qumran. De Vaux was not one of the first to associate Essenes with Qumran; dissenters were abundant. A myth of three history of scholarship phases—a void; a de Vaux-alone era; and light now dawning—will not do. The introduction ventures a dichotomy between archaeological and literary work, somehow unsatisfactorily categorizing the distinguished dirt archaeologist Jodi Magness with the latter, as if she did not first look to the material realia. Her fine paper, “Why Scroll Jars?,” is published elsewhere (Magness 2004). If one seeks a dichotomy, perhaps it should divide those who try to consider all the evidence from those who selectively bracket off and ignore some evidence.

Jean-Baptiste Humbert, “Some Remarks on the Archaeology of Qumran,” elaborates on his proposal that Qumran was first secular, then Essene, including religious sacrifices. He claims (p. 29) that de Vaux and Magness had a priori commitments to Essene use of the site. But this is merely asserted, not shown. De Vaux was convinced by evidence as he dug. De Vaux made some mistakes (e.g., in not leaving enough undisturbed area for later researchers). Humbert controls the remains from de Vaux’s dig. I am not the only one to hope that he will either speed the publication, without waiting for commentaries, or allow open access to all.

James F. Strange, “The 1996 Excavations at Qumran and the Context of the New Hebrew Ostrakon,” helpfully reviews the technical means of attempting remote viewing and the ostrakon setting, misreported in some secondary literature.

Yizhak Magen and Yuval Peleg, “Back to Qumran: Ten Years of Excavation and Research, 1993–2004,” give a preliminary report. The book’s introduction suggests that until de Vaux’s work is completely published, “we will have to turn to Magen and Peleg for the most reliable and complete picture of the Qumran material culture . . .” (p. 5)—an imprudent recommendation, given that this preliminary publication, largely based on digging in dumps, is much less completely published and evaluated than de Vaux’s. (The best current overview is Magness 2002.) Magen and Peleg suggest Qumran was first a “fortress,” though its walls are not fortified, and secondly a pottery manufacturing center, despite its unfavorable location for exporting

coarse pottery uphill. They think their greatest find is clay in water installation Locus 71. If so, it would be a lot of trouble to obtain clay, more readily available elsewhere. Do they offer parallels? No, in fact, they say this site is unique in the area in using floodwater to obtain clay. Also lacking is scientific analysis of this clay, to compare with tested pottery. Zeuner (1960: 32) dismissed the cisterns as a source of usable clay. They report on objects, but lack stratigraphy to date many reliably. Perhaps the final report will offer more. They "examined" (p. 98) nine burials in the cemetery. Interestingly, two of these had no bones but 14 sealed jars with lids, containing "organic material, probably date honey." The remains were all adult. They don't specify alignment, nor, oddly, sex, having declared, "We have no intention of becoming involved in the sterile debate concerning the women buried there." One hopes their physical anthropologist, Yossi Naggar, will issue a proper scientific report. Joan Branham's "Hedging the Holy at Qumran: Walls as Symbolic Devices," is on liminality.

Joan E. Taylor, "Khirbet Qumran in Period III," helpfully draws attention to the period, starting in 68 C.E. I add: zealots may have briefly squatted there, Essenes likely having fled east. Some "luxury" items are from Period III, a period de Vaux underestimated in length and importance.

Gregory L. Doudna, "The Legacy of an Error in Archaeological Interpretation: The Dating of the Qumran Cave Scroll Deposits," claims that de Vaux misdated a "scroll jar" in Locus 2, and that this "error" led to dating scroll deposits seven or more decades too late. Doudna quotes a sentence fragment from Bar-Nathan's pottery catalog, ignoring her explicit statement that she agrees with Magness on the end of Period Ib as 9/8 B.C.E. or soon after; and Bar-Nathan repeats that agreement, citing Magness, again in this book (p. 275). This is one example of misreporting or bracketing off evidence that characterizes this unreliable essay. In contrast to dismissing ¹⁴C, palaeographical, and archaeological data that point to first century C.E. manuscripts as too uncertain, he claims "dozens" (p. 55) of first-century B.C.E. internal text allusions to history. How certain, we may ask, are we to consider these "dozens," not one of which he specifies? De Vaux changed his dating based on what he dug. The ca. 70 C.E. deposit date was suggested before the 1951 dig (Dupont-Sommer 1950: 8).

Stephen Pfann, "A Table Prepared in the Wilderness: Pantries and Tables, Pure Food and Sacred Space at Qumran," gives a well-presented, if a bit speculative, reconstruction of Essene meals. Pfann declares that Essenes were named "by outsiders" (p. 161). James Tabor's unpublished paper said that the self-designation, observers of Torah, 'osey hatorah, was supported as the source of the various Greek spellings of "Essenes" and "Ossenes." If so, some of the scrolls (e.g., 1QpHab VIII 1) tell us they are Essene (Goranson 1999).

Olav Röhrer-Ertl, "Facts and Results Based on Skeletal Remains from Qumran Found in the *Collectio Kurth*: A Study in Methodology;" and Susan Cuise Sheridan and

Jaime Ullinger, "A Reconsideration of the Human Remains in the French Collection from Qumran," underappreciate possible Period III or Bedouin burials. Konstantinos D. Politis, "The Discovery and Excavation of the Khirbet Qazone Cemetery and Its Significance Relative to Qumran," emphasizes similarities between these two cemeteries, though his site has more grave goods, and the Qumran cemetery may have started earlier.

Yizhar Hirschfeld, "Qumran in the Second Temple Period: A Reassessment," claims (p. 237) that only after 1948 were Essenes thought to live in the Qumran area. Not so. In fact, many pre-1948 writers located Pliny's Essenes in this "north-west shore" (Ginsburg 1870: Vol. 3: 301-5; see Taylor 2002 and Goranson 2005: 8 for more examples). Pliny never set foot in Judaea; he used a source, Marcus Agrippa (Goranson 1998).

Joseph Patrich, "Agricultural Development in Antiquity: Improvements in the Cultivation and Production of Balsam," supports Qumran as a communal center and cautions against imagining it as a royal balsam plantation. Patrich was not at the conference, but his paper is a welcome addition.

Magen Broshi and Hanan Eshel, "Was There Agriculture at Qumran?," argue that, beyond dates, the area's soil and water were too salty to allow much in the way of agriculture.

Mireille Bélis, "The Production of Indigo Dye in the Installations of 'Ain Feshkha," is interesting, but, given scant weaving evidence, seems less plausible than date processing.

Rachel Bar-Nathan, "Qumran and the Hasmonean and Herodian Winter Palaces of Jericho: The Implication of the Pottery Finds on the Interpretation of the Settlement of Qumran," compares much regional pottery, but gives either ambiguous or seemingly contradictory dates for Qumran's strictly cylindrical "scroll jars" (p. 275).

The book ends with a Conference Schedule, Bibliography of Secondary Literature, and Indices of Ancient Literature, Subjects, Ancient Individuals, and Locations. Among the omissions in the bibliography are Farmer 1955 and 1956.

Despite vigorous attempts to insist otherwise, Kh. Qumran is most plausibly explained as an Essene site for much of the first centuries B.C.E. and C.E. The task is to better understand that history.

Stephen Goranson
Duke University
goranson@duke.edu

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***Out of the Cave: A Philosophical Inquiry into the Dead Sea Scrolls Research*, by Edna Ullmann-Margalit. Cambridge, MA: Harvard University Press, 2006. 167 pp., 2 figures, 7 photographs. Cloth. \$45.00.**

Edna Ullmann-Margalit, a professor of the philosophy of science¹ at the Hebrew University of Jerusalem, has turned her interest in the Dead Sea Scrolls into a fascinating study of the scholarship on the Dead Sea Scrolls. As she

makes clear in the introduction (p. 17), Ullmann-Margalit makes no claim to expertise in the Scrolls, but is rather engaged in “second-order” scholarship; her subject is the study of the Scrolls.

The book is divided into an introduction and three chapters: Chapter 1, “Writings and Ruins: The Essene Connection”; Chapter 2, “A Hard Look at ‘Hard Facts’: The Archaeology of Qumran”; and Chapter 3, “Sects and Scholars.” In the introduction, Ullmann-Margalit lays out her primary goal, which is “to subject to scrutiny the inner logic of the main theory of Qumran studies as well as of the rival theories.” The main theory is the Qumran-Essene hypothesis, which Ullmann-Margalit defines as follows: “the scrolls found in the caves [in the vicinity of Qumran] belonged to the sect of the Essenes and that the Essene center, or ‘motherhouse,’ was at the nearby site of Khirbet Qumran” (p. 23). As Ullmann-Margalit notes, this hypothesis can be broken down into three constituent elements, which she puts in the form of questions: Why Essenes? Why Qumran? Why a sect? (p. 16). Each of these questions is addressed in the following chapters.

What most interested this reviewer was the way in which Ullmann-Margalit, as a philosopher, investigated the staying power of, and unpacked the inner logic behind, the Qumran-Essene hypothesis. She is well aware that most Dead Sea Scrolls scholars are not logicians or trained in scientific methodology, so she does not waste her time criticizing Scrolls scholarship for its lack of hard, scientific methodology (a criticism sometimes leveled from other quarters). Rather, she takes Scrolls scholarship as a “soft” discipline (even though the archaeology of Qumran deals with “hard” data, the interpretation of that data is still soft, or “fungible” [p. 60]), and proceeds from there.

Ullmann-Margalit notes that the Qumran-Essene hypothesis, from the very beginning of Scrolls scholarship in 1948, has been the dominant hypothesis explaining the evidence of both the Scrolls themselves and the archaeology of Qumran. All other hypotheses have gained only a handful of adherents, and most have been dismissed out of hand. (Discussing her interactions with Scrolls scholars, Ullmann-Margalit makes an astute observation concerning “the eerie feeling one sometimes gets, that in dealing with the Dead Sea scrolls one is facing a sectarian phenomenon not only as regards the authors of the scrolls, but as regards their researchers as well” [p. 18].) She notes that the Qumran-Essene hypothesis is “thick”; that is, the interplay of texts (both the Scrolls themselves and the classical sources Josephus, Philo, and Pliny) and archaeology form a “strong linkage” argument, in which the chain is stronger than any of its links (pp. 48–49). The links of the chain are laid out in two strands of argument. The first strand concerns the texts: the contents of the scrolls found in the caves are compatible with the ancient descriptions of the Essenes, so therefore the scrolls are Essene. The second strand concerns the archaeology: the site of Qumran is compatible with Pliny’s location of the Essenes, therefore the Qumran

¹I would like to thank my husband, Dan D. Crawford, of the Philosophy Department at the University of Nebraska-Lincoln, for helping me to clarify my understanding and usage of the philosophical terms found in this review.