
This volume contains fifteen chapters consisting mostly of scientific studies relating to the archaeology of Qumran and the Dead Sea Scrolls, which were presented at a 2008 workshop organized by Gunneweg (who is the sole author of four chapters and co-authored five others). The papers are a mixed bag in terms of the types of scientific analyses employed, the usefulness of the analyses, and their relationship to Qumran. For example, in Chapter One, “The Coin Beneath the Crust: A Pilot Study of Coins from the Mediterranean Coast of Israel,” Adriaens et al. apply synchrotron X-ray diffraction (SR-XRD) and neutron micro-tomography to three Byzantine-early Islamic bronze coins from Atlit and Caesarea Maritima. These techniques show promise in enabling corroded coins to be read without cleaning, although the coins have no connection to Qumran. Furthermore, the authors note that similar results might be obtained with photography using controlled illumination, filters, and polarized light.

In Chapter Four, “Was the Qumran Settlement a Mere Pottery Production Center? What Instrumental Neutron Activation Revealed,” Gunneweg and Marta Balla report that clay from cisterns 58 and 71 does not match the composition of any of the analyzed pottery from Qumran, nor does it match samples of pottery from Ein Gedi. This suggests that Qumran was not a pottery manufacturing center, as Yuval Peleg and Yitzhak Magen have proposed. In Chapter Seven, Bridget M. Murphy et al., “Degradation of Parchment and Ink of the Dead Sea Scrolls Investigated Using Synchrotron-Based X-Ray and Infrared Microscopy,” discover that the scrolls likely were written using a bone glue based ink binder, which permeated the parchment and caused it to decay.

Some of the papers highlight the limitations of scientific analyses, which often are no more conclusive than other methods of analysis and are equally open to interpretation and bias. In Chapter Six, Gila Kahila Bar-Gal et al. report on a genetic study of “Animal Remains from Khirbet Qumran: A Case Study of Two Bones (QUM 392 and 393) from Two Bone Deposits.” The bones come from buried deposits on Qumran’s southern plateau, which were excavated by Randall Price and Oren Gutfeld. However, no DNA could be recovered from the bones, nor could they be radiocarbon dated due to a lack of collagen. In Chapter Ten, Kaare L. Rasmussen et al. report “On the Age of Jar-35,” an intact jar discovered in connection with the animal bone deposits discussed in Chapter Six. Four samples from the jar, which were subjected to thermoluminescence (TL) dating, yielded dates averaging 685 C.E. ± 41 and 680 C.E. ± 42. Four more samples taken from three ceramic vessels found in proximity to the first jar yielded the
following dates: 139 C.E. ± 140; 710 C.E. ± 97; no date; and 840 C.E. ± 92. The authors suggest various reasons why the dates are so inaccurate. On the other hand, three charcoal samples from the interior of the first jar yielded a calibrated radiocarbon date of 90 B.C.E.–18 C.E. The fact that scientific analyses are no more objective than non-scientific studies is perhaps best illustrated in Chapter Eleven, by Rasmussen et al., “Analyzes [sic!] of a Sample of ‘Masse de Fer’ from Qumran Locus 104 Excavated by R. de Vaux.” Analyses of this object (SEM-EDX and XRD) indicate that it is not iron, but consists mainly of quartz grains with another, unidentified crystalline component, and had been subjected to heat or fire. Although the authors make it clear that this object is not the clay mineral bentonite, they speculate that the inhabitants of the Qumran settlement thought it was bentonite and intended to use it for the production of brown colored pigment—a leap that does not appear to be consistent with the results of their analyses.

In Chapter Three, Katharina Galor considers the issue of “Gender and Qumran,” arguing that the presence of “gendered objects” (objects associated with women) indicates that Qumran is no different in this regard from other sites in the region (the implication being that Qumran is not a sectarian settlement). She begins by identifying all of the excavated graves in the cemetery as ancient, rejecting the suggestion that the burials on the southern periphery and to the south of Wadi Qumran are Bedouin: “What we can say with certainty, however, based on the evidence that was available for study, is that: the Qumran tombs and cemetery are similar to many others known in the Dead Sea area as well as the region of Palestine as a whole and beyond. All excavated burial contents indicate a late Hellenistic and Roman date for the tombs and appear to be largely contemporay with the nearby settlement” (31). As no footnotes or bibliography accompany these statements, it is impossible to know what Galor has in mind when she refers to many other similar tombs and cemeteries throughout the country. Furthermore, although she asserts that the jewelry from the female burials at Qumran is early Roman in date, similar beads, rings, and earrings are attested from the modern Bedouin cemetery at Tell el-Hesi (which consists of trench graves, sometimes with stone slabs covering the pit at the base in which the body was laid; see Lawrence E. Toombs, *Tell el-Hesi: Modern military trenching and Muslim cemetery in Field I, Strata I–II, The Joint Archaeological Expedition to Tell el-Hesi, Volume Two* [Waterloo, Ont., Canada: Wilfred Laurier University, 1985]). The east-west orientation of the female burials with jewelry also accords with Muslim custom. The second type of evidence cited by Galor consists of a hairnet and tunic or mantle fragments, one of which is decorated with a gamma-shaped pattern. Galor informs us that the hairnet and clothing come from “nearby caves” (32–33), but does not specify which caves and provides no bibliographical references or citations. The only cave she mentions—the so-called Christmas cave, which yielded the fragment with the gamma-shaped pattern—has no connection