

Material Meanings (Critical Approaches to the Interpretation of Material Culture)
1999 edited by Elizabeth S. Chilton, Foundations of Archaeological Inquiry
Series, University of Utah Press, Salt Lake City.

Mulvaney, John and Johan Kamminga
1999 *Prehistory of Australia*, Smithsonian Institution Press, Washington D.C.

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University of Arizona, Tucson.

V. Book/Journal Article Reviews

Man Corn: Cannibalism and Violence in the Prehistoric American Southwest. Christy G. Turner II
and Jacqueline A. Turner. University of Utah Press, Salt Lake City, 1999. v + 547 pp., ISBN 0-
87480-566-X \$60.00 (cloth).

by

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Human sacrifice and cannibalism, the potential for institutionalized violence or warfare, witchcraft or sorcery, and ritual executions are emotionally charged issues; but some anthropologists and other learned scholars now suggest that these activities and behaviors occurred in the American Southwest, a region usually depicted for peace, harmony, tranquility, and spirituality. Christy Turner, Regents' Professor in the Department of Anthropology at Arizona State University, and his late wife, Jacqueline (1934-1996), are the co-authors of *Man Corn*. The book's title derives from the Nahuatl word *tlacatlaolli*, a "sacred meal of sacrificed human meat, cooked with corn." The Nahuatl and Mesoamerican connections are more than coincidental. The idea for this volume was conceived in 1958, and Christy dedicates the volume to the memory of his wife. They comment (p. 8) that "research on cannibalism has not been free of controversy or political and professional censoring" and they cite instances where their work has been disbelieved, dismissed, or admonished.

The narrative is divided into five chapters, supplemented by one six-page appendix (a discussion about and reproduction of four data-collecting forms), a four-page acknowledgment, 348 black-and-white figures (halftones and illustrations), 111 tables, and 499 references cited. There is also a detailed index to sites (n = 141) and an elaborate nine-page general index of conflated proper nouns and topics. I shall summarize briefly the major contents of each chapter and offer some comments before turning to an overall critique of the volume.

In Chapter 1: "Introduction: Studying Southwestern Cannibalism" the authors state (p. 2) that "this book is the first to examine prehistoric Southwestern cannibalism on a regional scale rather than site by site. It has two goals. First, we define and illustrate the characteristics of damaged human bones that we believe reflect acts of cannibalism in the American Southwest. Second, we attempt to explain why cannibalism occurred there, offering a few working hypotheses about local, proximate causes." This regional approach, they assert (p. 2), produced five principal findings. I shall evaluate these later in this review.

Chapter 2: "Interpreting Human Bone Damage: Taphonomic, Ethnographic, and Archaeological Evidence" provides an excellent review of methods of interpretation. Among the topics assessed are environmental processes, the mechanical and physical breakdown of bone, and human activities (burning and "pot polishing" from culinary activities. A thorough assessment of ethnographic accounts of animal processing and archaeological data, provide comparative evidence for the definition of the "signature of cannibalism." The killing and mutilation of witches among Southwestern Pueblo peoples (pp. 52-53) is mentioned and evaluated, but discounted; I shall revisit this issue later in this review. The Turners conclude that ethnographic analogy provides evidence for the roasting and boiling of humans in the same manner as game animals.

In Chapter 3: "Taphonomic Evidence for Cannibalism and Violence in the American Southwest: Seventy-six Cases, the Turners document, illustrate, and discuss 76 sites where cannibalism or other violence both occurred. In 316 detailed pages (supplemented by 292 figures and 82 tables), the authors consider 31 sites located in New Mexico, 18 from Arizona, 16 situated in Colorado, 10 in Utah, and Casas Grandes (Paquime) from northern Mexico. Data is summarized in a 17-part format: Claim Date, Claimant, Claim Type, Other [Site] Designations, Site Location USGS Quadrangle and elevation], Site Type, Cultural Affiliation, Chronology, Excavators and Date, Institutional Storage, Site Reports, Osteological Reports, Skeletal Evidence of Stress, Burial Context, Associated Artifacts, Figures (in the Turner's book), and Taphonomy. The last unit, Taphonomy, is further divided into 11 categories: MNI (Minimum Number of Individuals), Age and Sex, Preservation, Bone and Fragment Numbers, Breakage, Cut Marks, Burning, Anvil Abrasions, Polishing, Vertebrae Numbers, and [Evidence of] Scalping. Often there are extensive quotations from the original site reports and osteological analyses.

The authors completed their data collecting in August 1995, but remark on human osteology from 11 other sites excavated and reported since then (p. 404). They also emphasize that the data they assess and tabulate errs on the side of conservatism (p. 413). Of the 76 cases, the Turners confirm 54 instances of cannibalism, discount eight, and are unable on the basis of the evidence to sanction 14 others. Table 3.77 lists 38 sites with 286 MNI; 52.1 percent are adults, however, adults identifiable by sex include only 29 males and 28 females (a total of 19.8 percent). Therefore, in those sites exhibiting cannibalism there are nearly equal frequencies among adult males and females. In 38 sites with demonstrated violence (Table 3.78), there are 445 MNI, of which only 37.7 percent are adults, or 94 males and 35 female adults. The Turners suggest that because there are more than twice as many adult males as adult females represented, either that more women were spared or captured, or that males were more frequently involved in the fatal conflicts. Combining these data, violence or cannibalism account for 731 individuals, 43.4 percent of these were adults and 23.6 percent could not be aged or gendered. There is a minor error in the Turner's tabulations; Table 3.80 refers to 62 sites for the period 900- 1300, while comparable data in Table 3.81 uses a figure of 69 sites.

The Turners perceive the Chacoan connection as a common variable associated with these sites, and they make three points: 1) Southwestern sites with evidence of cannibalism are linked temporally to the so-called Chaco phenomenon; 2) Mesoamerican influence is seen in the rise and fall of Chaco, but the extent of this is uncertain; and 3) Mesoamerican cannibalism is linked to ritualized body processing. Five minimal summary conclusions are then stated (p. 413): 1) Perimortem taphonomic signatures of violence and cannibalism are distinct; 2) perimortem cannibalism is the same as that found in the processing of large and small game animals in both the prehistoric and contemporary periods; 3) Anasazi sites and the Chaco phenomenon are “strongly linked to cannibalism for the period C.E. 900-1300; 4) Southwestern cannibalism seems to have begun with Chacoan development and areal expansion; and 5) 38 episodes of cannibalism involved 286 persons of all ages and sexes. Unfortunately, the Turners do not further evaluate the assembled data (pp. 59-404) on, for example, site types, specific cultural affiliations, and loci of human remains.

Mesoamericanists and Southwestern scholars will be drawn to the information summarized in Chapter 4: “Comparative Evidence: Cannibalism and Human Body Processing in Mexico.” Some of the osteology was examined personally by the Turners, and the ethnohistoric and ethnographic literature was also evaluated, leading to the conclusion that cannibalism has been practiced in Central Mexico for a minimum of 2,500 years and possibly 6,000 years. The question of the magnitude of this practice is unresolved for the earlier periods. There are no clear occurrences from Preclassic Olmec in the Gulf Coast or Meseta Central.

The Turners discuss evidence from the Basin of Mexico, including the human osteology from the Classic Teotihuacan period (ca. C.E. 100-750) residential sites of Maquixco (TC-8) and Tlajinga 33, and the Feathered Serpent Pyramid in the Ciudadela, but their supposition is in error. There is no confirmed documentation of cannibalism for Classic period Teotihuacan. Not cited by the Turners is Michael Spence’s forensic analysis, “some bone might have ended up in dumps because of cannibalism. No traces of cutting, scalping, or marrow extraction were observed on any of the human bone” (Millon 1994:339). The cremation of Teotihuacanos by members of their own society apparently prevailed, although subfloor pit interments (with grave goods) in residences are also found. Storey’s (1992: 129-130) evaluation of 206 individuals identified in the Tlajinga 33 Classic period site show some signs of cut marks on a few human specimens (possibly one individual) but no evidence of burning or boiling. This suggests sacrifice rather than cannibalism as the Turners have defined it. They also state (pp. 421-422) that the suburban Maquixco site produced “large quantities of split and splintered human bone fragments in general garbage and trash heaps, indicating that humans were being used for food.” As a participant in the excavation of and artifact processing from this site in the early 1960s, I take exception to this assessment, as would Frank Saul and the late Larry Angel who both examined these well preserved human remains.

Likewise, there is no evidence of cannibalism, although there were ample indications of sacrifice, seen in the human remains recovered from the Feathered Serpent Pyramid excavations by Cabrera, Cowgill, and Sugiyama (personal communications). The studies conducted by Spence (personal communication) which confirms the hypothesis of captive sacrifices and determines, on the basis of oxygen isotope analysis, that the chemical signature of these individuals’ osteology indicated that they were foreigners to the Basin of Mexico. I have no report on evidence on the human osteology from Saburo Sugiyama’s current Pyramid of the Moon excavations, where a high status burial with bound hands accompanied by raptorial birds and two jaguar skeletons were recovered in situ.

Chronologically the key to the Turners' argument about interpersonal violence and cannibalism in the American Southwest is the Early Postclassic Toltec period and particularly the site of Tula, Hidalgo, excavated by Mexican and American archaeologists over many years. The Turners report correctly that Tula has "not yet produced clear-cut osteological evidence of sacrifice" (p. 425-426). Benfer (1974), who had also studied the skeletal remains from Casas Grandes, reported no evidence of cannibalism or violence among six human burials that he studied at the site of Tula. The Turners do not cite his analysis nor other documentation from this same site provided by Healan (1989), who reported a skull fragment, caches of human limb bones, a burial within an altar, and a subfloor urn burial. Diehl (1983:98) conjectured that "the burnt human bones found in our excavations [at Tula] indicate that human flesh was considered edible. The bones probably came from sacrificial victims who were slaves. The frequency of cannibalism is not known...." He also stated that fragmentary human skeletons and miscellaneous human bones mixed with other debris on and above room floors was "puzzling" at the Corral Locality excavations, but provided a hint of cannibalism (1983:94, 95). However, no one has provided incontrovertible documentation for sacrifice or cannibalism at Tula, capital of the Toltecs. The Turners were unable to examine these specimens.

The authors themselves personally evaluated skeletal materials from Formative period Coxcatlan Cave in the Tehuacan Valley (Burial 2, a five-year-old with potential evidence of "cranial roasting"), ca. 6000 BP. Human remains from Preclassic Tlatelcomila, the Classic period Electra and Alta Vista sites, and 170 skulls from Tlatelolco (Mexico, DF) Aztec tzompantli (skull rack) were also examined by the Turners. Evidence for sacrifice and potential cannibalism is evident for the Late Postclassic Aztec period (C.E. 1200-1520). However, there was no evidence for warfare, sacrifice, or cannibalism seen in human specimens recovered from sites in the Mexican states of Sonora, Durango, Nayarit, or Coahuila (p. 426). Trophy heads were found at the site of Guasave, Sinaloa, and there was minimum direct evidence of cannibalism at Casas Grandes, but clear evidence of sacrifice and cannibalism at La Quemada, Zacatecas (C.E. 1000-900) (p. 428). Based upon this "evidence," the Turners conclude that human sacrifice and cannibalism are much older in Mesoamerica than in the American Southwest (p. 457-458). However, for La Quemada (Nelson, Darling, and Kice 1992:305-308) - not cited by the Turners — mortuary practices included the use of a chamal house, a skull-trophy rack, articulated (but decapitated) skeletons, articulated complete skeletons, and bone piles. Cannibalism was not suggested.

Hassig (1988: 121) reminds us that warfare during the Late Postclassic Aztec period emphasized the taking of captives, usually nobles and warriors, for purposes of sacrifice, and he writes that "after they were killed, the bodies were laid by the skull rack, and each warrior identified the one he had captured. Then the body was taken to the captor's home, where it was eaten; the bones were hung in the house as a sign of prestige. The heads of those who were sacrificed were skinned, the flesh was dried, and the skulls were placed on the skull rack." There is no evidence that women, children, or infants were slain or their flesh consumed. The Turners use the older Bandelier translation of Sahagun's Florentine Codex, rather than the definitive Dibble and Anderson translation (Sahagun 1953-1982). Four books from the newer rendition consider the Aztec human sacrifice of captives, with Book 2: Ceremonies, providing the most information (Books 1:19; 2: 3, 24, 47-48, 52-53, 170, 179; 4:35; 9:64, 67).

In Chapter 5: "Conclusion: Explaining Southwestern Cannibalism" the authors offer hypotheses in order to explicate the occurrences of Southwestern cannibalism. Among those assessed are starva-

tion or "emergency" cannibalism, social pathology, and institutionalized violence with cannibalism. The Turners reject starvation as a general explanation after considering Hopi, Zuni, and other Pueblo Indian oral traditions. They turn to a combination of social control, human ritual sacrifice and social pathology as a proximate explanation, and mention Mesoamerican sources beginning with Classic period Teotihuacan (pp. 462-463). Maya specialist Richard Adams's (1991:256-257, 285) textbook is cited in which he postulates Toltec migrations to the American Southwest C.E. 800- 1000. The authors next evaluate Mesoamerican influence on the Southwest prior to a discussion of direct contact and the diffusion of cultural traits. "Dental Evidence for Mexicans in the Southwest" (pp. 472-477) is offered as confirmation. Dental transfiguration (a term preferred to "dental mutilation") among some adults at Guasave, Sinaloa in West Mexico and at several sites in Arizona and New Mexico, including Pueblo Bonito, suggest to the Turners that "Mexicans were physically present in the Southwest" (p. 476). This argument is very "thin" and the human osteological sample sizes and frequencies of occurrence are carefully minimized in the narrative.

The social control hypothesis is seen as a viable explanation, and they also assess social pathology and psychiatric disorders, but rejected these. The concept of institutionalized violence, such as a cannibal warrior cult, is discussed, and the Turners conclude that (pp. 482-483): "The interregional contrast in Southwestern cannibalism seems to fit the idea of an actual Mexican Indian presence stimulating or even directing the Chaco phenomenon. We propose that these southerners were practitioners of the Xipe-Totec (or Maasaw) and the Tezcatlipoca-Quetzalcoatl (plumed serpent) cults. They entered the San Juan basin around A.D. 900 and found a suspicious but pliant population whom they terrorized into reproducing the theocratic lifestyle they had previously known in Mesoamerica...." The Mexicans achieved their objectives through the use of warfare, violent example, and terrifying cult ceremonies that included human sacrifice and cannibalism. After the abandonment of Chaco, human sacrifices and cannibalism all but disappeared, suggesting some kind of prehistoric discontinuity."

The Turners suggest that small mammals (prairie dogs, for example), pronghorn antelope, and humans were treated in much the same way, therefore, circumstances rather than animal type or cultural tradition determined the cooking method that was employed (p. 31). But how does this statement correlate with the postulate of the immigrating terrorist cultists from the south "reproducing the theocratic lifestyle they had previously known in Mesoamerica, achieving their objectives through the use of warfare, violent example, and terrifying cult ceremonies that included human sacrifice and cannibalism" (p. 483)? Cremation ensures that the body (and spirit) of the deceased will not be consumed by real or perceived enemies. What role did this play in Central Mexico, especially Classic period Teotihuacan (C.E. 100 6~0) where many cremations are known archaeologically, at Early Postclassic Tula of the Toltecs (C.E. 700-1300), and the evolution of the Late Postclassic Aztecs (C.E. 1100-1520)? Evidence for the cremation of human corpses in the American Southwest is not discussed adequately.

The scientific community whether historians of Native Americans, archaeologists, anthropologists, sociologists, human biologists, or pathologists will appreciate the massive, systematic documentation that the Turners provide in Chapter 3. The amassed evidence is compelling and documented by superb photographs. The regional approach produced five principal findings that I shall now assess. 1) Cannibalism can be differentiated from all other forms of bone damage and mortuary practice. The evidence that they present in *Man Corn* is compelling. They contend that 2) cannibalism was practiced for almost four centuries (ca. C.E. 900-1300), and was concentrated in the Four Corners

area especially among people living in Chaco Canyon and in or near outlying Chacoan great houses. The chronometric data (derived in the main from dendrochronology) and relative chronologies (from ceramic seriation) confirm the time frame. The geographical distribution is, likewise, substantiated. The lack of cannibalism among the Hohokam appears to be documented, but has the osteological evidence been as meticulously examined as the Turners would like? If the Hohokam, because of proximity, were influenced to a greater degree by Mesoamerican cultures than other prehistoric Southwestern peoples, your reviewer wonders why evidence of the activity is not represented substantially in Hohokam territory.

The Turners state that 3) Chacoan cannibalism “appears to have originated in Mexico,” (p. 4) where the practice dates back at least 2,500 years. Here is argument they advance is weak. Evidence for violence and cannibalism in the Classic period Teotihuacan polity (ca. C.E. 100-750) located north-east of Mexico, the extant evidence cannot support the hypothesis. At its apogee, C.E. 600, there were at least 125,000 and possibly 200,000 urban residents and another 25,000 to 30,000 inhabitants of nearby rural villages. Yet only about 800 human burials have been identified. What happened to the people of Teotihuacan and why was the metropolis abandoned remains a major problem in Mesoamerican studies. The succeeding major political state was that of the Toltecs, centered at Tula, Hidalgo. The human osteological evidence from Toltec sites anywhere in the Meseta Central is too meager and inconclusive to suggest cannibalism. However, the evidence that the Turners have mustered cannot support the supposition that a cult of terroristic Mesoamericans — Toltec cult terrorists — were responsible for the creation of the Chaco complex.

Likewise, the Turners contend that 4) social control, social pathology, and some manner of ritual sacrifice (probably in that order) are provisionally the best combination of explanatory factors. Darling (1998) challenges the validity of the argument that cannibalism best explains the evidence of defleshing, cutting, and bone breakage. His review of the ethnographic and ethnohistoric literature on Pueblo and Navajo witchcraft, and witch torture and execution that included dismemberment. Twenty-two accused witches were interrogated during “trials” which often included the hanging or clubbing of those accused; six individuals were executed by clubbing or stoning. Likewise, he summarizes the contexts of defleshing and disposal activities, artifacts, burning, osteological remains, age and gender, and the timing of these activities.

Darling’s (1998) “selected” 21 archaeological sites that exhibit mass inhumations with modified human remains may be compared with the 76 listed by Turner and Turner. Of the 21 sites, the Turners also reported 16, and in each case the Turners own analysis confirmed that cannibalism had taken place. My own review of Darling’s data reveals that most of these sites are culturally Anasazi (12), with Anasazi-Mogollon (2), Basketmaker III/Pueblo (1), Hopi (1), and affiliation not stated (5). Ten of 16 sites dated to C.E. 1100+ (two others were C.E. 400-900, two were 1000+, two were 1200+, and one was 1500+). The human remains were from pits (6), charnal houses (3), found on the floor (3), recovered in architectural fill (3), or found in a subfloor context (1), and in a bonebed (1). Darling’s 16 sites have an MNI of 194 (110 adults, 14 subadults, 24 children; 19 male and 20 female). In the 16 cases, broken bones (13), burning (10), cutting (5), scalping (4), pot polishing (2), and chopping (1) were discerned. These chronological and contextual data are consistent with the Turner’s thesis of violence and cannibalism. Pits, it would appear, would be the preferred repositories for the bodies of witches and these corpses might be ritually “killed” by clubbing or smashing the remains.

Lastly, the authors rightly state that 5) reports of prehistoric Southwestern cannibalism have been published for almost a century, but have been largely ignored by the scientific community. The evidence the Turners provide is conclusive on this issue.

In summary, was Chaco such a center of violence and cannibalism that contemporary Native Americans of the region avoid it as a place of "bad medicine"? Probably. However, the fatal flaw of this book is the conclusion that peoples from Mesoamerica were responsible for this phenomenon at Chaco. The violence that resulted in mutilated human remains has other potential explanations, such as that postulated by Darling. But, can we account for these numbers of dismembered and smashed bodies as exclusively witch executions that appear in the oral traditions of the American Southwest? Could at least some if not fully one-third of the cases cited by the Turners be attributed to witch executions? Although the Turners dismiss the witch execution explanation (pp.52-54), Darling does not press the issue sufficiently in terms of parallel cases of witch executions. The witchcraft hypothesis emphasized by Darling (1998) requires a further evaluation, perhaps using the works of Parrinder (1963) and Trevor-Roper (1969), among others, on the European Middle Ages. Another question to ponder - would a perceived witch's family also be slain and their household goods destroyed ritually?

The book's title from the Nahuatl *tlacatlaolli* a "sacred meal of sacrificed human meat, cooked with corn," is, to my thinking, an unwise choice. Although the term conveys Late Postclassic Aztec-Mexica-Nahuatl connotations and connections, the vast majority of the instances of Southwestern cannibalism cited actually date to the Early Postclassic Toltec era where the evidence for cannibalism is controversial and is not documented in the archaeological literature. Likewise, the implication that human flesh was mixed with corn and consumed cannot be supported for the Classic period (CE. 100-750) or the Early Postclassic Toltec era (ca. C.E. 700-1300). The Aztec evidence is more certain (see also Sahagun 1953-1982). There is no substantive evidence about the languages spoken by the Teotihuacanos or Toltecs — some scholars believe Otomi - but the Aztecs did speak Nahuatl. There is no incontrovertible evidence that the Toltecs were Nahuatl speakers; therefore, using a Nahuatl word to convey a Toltec culinary practice may be erroneous. Methodologically and comparatively, the Turners have moved well beyond Tim White's (1992) earlier assessment at the Mancos site.

I believe that we are just beginning a new round of debate on this sensitive and controversial topic, and I expect that additional publications pro and con will be forthcoming. At present, I can subscribe to the Turner's assessment of the osteological evidence but not to the hypothesis that Toltec cultists brought violence and cannibalism to the American Southwest.

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