I appreciate these extensive and insightful reviews, and I hope that they and my responses to them will foster additional research into the archaeology of divination and ritual generally and into the processes of change that occurred in conjunction with the development of complex societies in East Asia during the last several millennia BC. As is always the case with archaeologically inspired research, future investigations will continue to affect our understanding.

Several commentators recognize the value of long-term perspectives on ancient ritual practices. Allan, Falkenhausen, and Peek make this point most explicitly, and I am sure that this sentiment is shared by others. This is not an idle point or one that applies only to archaeologists. Falkenhausen urges historians of religion to develop diachronic research further, and the same call can be made to anthropologists who deal with contemporary ritual practices and the material aspects of changing ritual behavior.

A number of comments reflect my invocation of Mann’s (1986) four sources of social power: ideological, economic, military, and political. I chose not to elaborate on these various components because of the risk of exaggerating distinctions among them at the expense of the holistic approach that Campbell encourages. Although I emphasize the increasing importance of divination as a source of social power during the Shang, I do not mean to suggest that other sources were absent or unconnected. As Allan, Chen, and Fang all point out, control over the extraction and acquisition of certain resources was an important source of economic power during the Chinese Bronze Age (see Liu and Chen 2001). Military power is likewise evident not only in the form of bronze weapons and human sacrifice but also in inscriptions on oracle bones that relate to conflict. In fact, these social institutions are all intertwined. Examination of the diachronic course of
relationships between certain institutions and social power is nevertheless necessary and important.

The widest range of comments relates to the way we interpret the elaboration of divination marks. Peek emphasizes ethnographic variation in the relationship between the sophistication of divination practices and political complexity, and Jing criticizes the idea that elaborate oracle bones are straightforward evidence of the existence of states. Although I consider increasing elaboration in the Late Shang indicative of a peak in ideological practices (of a specific type) serving as a critical source of power during this period, I do not believe that this is universally the case. The diachronic change in other types of contemporary ritual activity, such as the intensity of human sacrifice, to which Jing points seems to offer further evidence supporting the changes I observe.

Along with Peek and Jing, Campbell asserts that the association between state bureaucracy and divination elaboration is problematic. His critique is as much of the typological approach to social form and political order as of the proposed linkage between ritual specialization and state control. I am sympathetic to the former concern but follow Yoffee (2005) in believing that states involve institutions that structure society in new ways. Nevertheless, in agreement with Smith (2003), I am ultimately less interested in the problematic definition of “states” than in the institutions of authority and integration that tie complex societies together and structure social interactions.

At Yinxu, the Late Shang capital, one line of evidence that supports a strong connection between divination and political power in the court comes from the inscriptions on many bones. This relationship has been the focus of most oracle bone scholarship. Allan, in support of the notion that elaboration is connected to status, makes
the important point that the inscriptions themselves should be taken as an additional
element of elaboration. This additional element reflects the development of oracle bone
divination during the late first millennium as a “prescriptive production process” (see Li
Yung-ti 2007)—the whole set of divided labor, alluded to by Fang, including the
acquisition of bones, and their storage, pretreatment, use in pyromancy, curation,
inscription, and further storage.

The relationship between oracle bone elaboration and political power concerns the
nature of divination practice, which I have labeled “specialized.” Chen appropriately
asks what I mean by this, implying that I suggest that all divination was monopolized by
Shang kings and high elites during the period of greatest elaboration. This was not my
intent. Specialization is a concept that encompasses a great deal of variation that should
not be ignored (Costin 1991; Flad and Hruby 2007). Those who were engaged in the
most elaborate Late Shang practice were in my view attached to the Shang elite through a
relationship that established a monopoly on their services, but, as Smith implies, they
need not have been the only diviners in the society. Unattached (or differently attached)
diviners were also “specialists” of a sort, particularly according to the broadest definition
of specialization, which emphasizes production on behalf of nondependents (Clark 1995;
Clark and Parry 1990; Flad and Hruby 2007). It is important to recognize the diversity of
specialization and tease out the important differences between practitioners of similar
practices in different social contexts.

In relation to this concern with divination as specialized activity, Jing would like
me to reconsider my use of the term “practical mastery” (I do not use the term “practical
knowledge”), suggesting that what I mean is “specialized knowledge.” Bourdieu (1977
[1972], 15) uses the term “practical mastery” as a mode of practical knowledge to refer to the informal, embedded, unexpressed (and inexpressible) ability to skillfully engage in specific social activity—often (but not necessarily) to the end of manipulating social relationships. “Specialized knowledge,” which Jing usefully introduces, is entirely consistent with practical mastery in the context of a specialized activity such as divination. I feel that we should consider the degree of practical mastery (and not just specialized knowledge) when discussing the development of oracle bone divination in East Asia because the success of divination depended in part on the ability to combine mechanical procedures with intuition and insight (Tedlock 2006).

By drawing our attention to my use of “practical mastery,” Jing has alerted us to an issue of contention among the various commentators—the relationship between the increased elaboration of bone pretreatment and the issue of predictability. Fiskesjö stresses the importance of changes in divination procedures that would have increased predictability, and this issue is the focus of comments by Kyriakidis, who points out that strategies for minimizing risk (to the diviners) may relate to the nature of client-patron relationships. This intriguing suggestion is echoed by Smith who compares this to the reliance on illusion and superstition to mitigate unpredictability in modern contexts.

I urge caution with regard to implying that ritual activities (past or present) are “irrational” (Brück 1999; Tedlock 2006), and I believe Peek shares this concern. He is also troubled by the suggestion of manipulation of results by divination specialists. As Smith and others point out, the direction of cracking was clearly controlled by the introduction of the double-hollow form, and in this sense the cracking was made more predictable. We do not know, however, exactly what the divination specialists were
interpreting and cannot assume that the outcome was being manipulated in a recognizable way. Nevertheless, the divination specialists during the Late Shang would have been concerned with addressing social uncertainty through the authority vested in them as mediators with ancestors and other supernatural forces.

Keightley laments the lack of attention paid to the question of ancestors. He has dealt with this issue extensively for the Late Shang (Keightley 2000, in addition to the references he cites), and the development of ancestor worship for earlier periods has also been explored (Liu Li 2000). Although I have no doubt that ancestors were another critical source of power for the Shang elite, it is worth being cautious in invoking ancestor worship as an explanatory tool, particularly for earlier periods (Whitley 2002). Likewise, I am hesitant to invoke “shamanism” across time in relation to this practice, although it is likely that oracle bone divination was in some ways shamanistic.

The double hollows and other pretreatments may require more attention than accorded in this paper. Allan posits a possible influence of Lower Xiajiadian practices on Erlitou divination traditions, while Jing focuses our attention on the Central Plains region. In additional comments to me Jing has pointed to several scattered examples of pretreated oracle bones across this region that are contemporaneous with and may be slightly earlier than the Lower Xiajiadian examples I cite. These examples are significant, and I draw attention to them here. [EE#2]

Cattle scapulae from the late Longshan sites of Xiaopangou in Mengjin, Henan (LB 1978, 255) and Xinzhuangji in Cao Xian, Shandong (HDWG 1980, 387) are said to have been drilled before being burned. Also in Shandong, at the Longshan site of Xingzhaizhuang, in Yucheng, about 10 fragments of scapulae and turtle plastrons have
some pretreatment, although these were surface-collected (DDWG 1983, 972). Finally, at Guanshe in central Shanxi, 12 cattle and pig scapulae were used as oracle bones during the late Longshan, and 8 of them seem to have been drilled before burning (Jie 1962, 32).

The Longshan tradition of the Guangshe region may have been significant in the development of the Xiaqiyuan culture that Jing mentions. In addition to 3 directly burned scapulae in the earliest stratum (level 4), the late Xiaqiyuan contexts (level 3) contain 12 cattle and sheep scapulae with chiseled hollows contemporary with Lower Erligang remains (HSWG 1979). In addition, one complete turtle plastron with well-aligned double hollows also apparently dates to this level. This single example predates the earliest double divination marks that I discuss in the text. In level 2, during the period immediately preceding the Late Shang (i.e., “Middle Shang”), 67 oracle bone (plastron and scapula) fragments, 17 of which have double hollows, have been found. These data support the chronology presented for transition in the significance of divination.

The Middle Shang remains from Xiaqiyuan are contemporaneous with the site of Huanbei Shangcheng (Tang, Jing, and Rapp 2000), located immediately adjacent to the Late Shang site of Yinxu. At Huanbei, 46 oracle bones with double divination marks are included among the 150 specimens found at the site in a number of different contexts, including pits at the Huayuanzhuang locus (ZSKYAG 2004) mentioned by Allan, who cites these remains as evidence for nonroyal divination. Although I agree that nonroyal divination occurred, these remains are not strictly contemporaneous with the inscribed bones from Yinxu.

A recently excavated example from Guandimiao may be better evidence of nonroyal Late Shang divination. This site, reported on January 17, 2008, at the Chinese
Academy of Social Sciences, is a ~10-ha. village recently excavated in Xingyang, Henan. It is an important example of a nonelite Late Shang community, and it contains two discoveries worth mentioning here. One is a pit containing an articulated cattle skeleton missing its scapulae, interesting because it suggests both the practice of cattle sacrifice and the select harvesting of cattle scapulae (see Yuan and Flad 2005). (In response to Keightley’s and Fikesjö’s call for more information about the contexts in which oracle bones are found, it may be said that many are found in pits along with other refuse, some in storage pits, and many in undifferentiated cultural strata. This topic deserves careful study.)

The second relevant discovery from Guandimiao is a cattle scapula used for divination with double divination marks—an example of a Late Shang oracle bone with elaborate preparation but no inscription in a nonroyal context. Fang mentions several others and suggests that these remains indicate a gradual dissemination of this practice. Although, as he points out, the procedures for creating double hollows were not technically difficult, proper divination procedure would have been more than a matter of technical proficiency.

Fang’s comments are echoed by several others who draw our attention to changes during the Late Shang. Keightley, for example, points to changes in the characteristics of inscriptions that may, as he suggests, relate to changes in the degree of development of social ranking. We see this in other diachronic studies of Bronze Age ranked communities in ancient East Asia (Flad 2002). Jing calls our attention to the possibility that diverse groups were coming together at the beginning of the Yinxu period, and this may suggest a reason that the performance of elaborate divination may have peaked at
this time. Allan mentions that Zhou procedures were already diverging by the time of the transition to the Zhou (i.e., in the late period of Yinxu). This enhances the comments made by Fang and also relates to the wide geographical spread of oracle bone divination after the Shang, when the practice was waning in the Central Plains. The oracle bones from Sichuan, the Three Gorges, and the middle Yangzi region speak directly to this point.

It is interesting to consider why, as Falkenhausen points out, despite ample textual evidence from the Zhou period for oracle bone divination, the scant archaeological evidence is largely limited to regions remote from the Zhou political core. Fang suggests that the change had to do with the introduction of yarrow-stick divination, but others have argued that, while divination at the popular level gave way to yarrow sticks, the most important divinations remained the purview of osteomantic specialists (Loewe 1981). Fiskesjö suggests that the demise of oracle bone use reflects the fact that the relationship between the court and the animal world was no longer as significant as it had been during the Shang.

Although considerably more research will be required to address this issue, I would suggest that these patterns of diachronic change are usefully discussed from the point of view that certain ideological practices serve as sources of social power for the ruling elite in the Central Plains. I hope that future research will continue to explore these issues.


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