
On an Alternative Interpretation of Paleoindian Site Use at Bonfire Shelter

David J. Meltzer, Ryan M. Byerly, and Judith R. Cooper

In the interest of fairness, the editors for this volume of the *Bulletin of the Texas Archeological Society* provided us with a copy of Elton Prewitt's response to our paper and gave us the opportunity to reply. We are largely content to let our papers (Byerly et al. 2005, and Byerly et al., this volume) speak for themselves, since they address many of the criticisms Prewitt raises: for example, the central point of our GIS analysis of the topography was that the site was indeed quite suitable as a jump (Byerly et al. 2005:605), and it was so regardless of ground cover or bison eyesight—though we are well aware of the greater role the latter can play in certain settings, having investigated a number of Paleoindian bison kills including the Folsom type site (Meltzer 2006). We also address the analytical flaw in Lorrain's quadrupling the number of animals in the bone bed, which is based on nothing more than the undocumented assumption that the density of bone is essentially uniform throughout the site (Byerly et al. 2005:610); and, because there are an equal number of bulls and cows in the bone bed (in so far as one can discern [Byerly et al. 2005:610]), it is analytically justifiable to use, as we do, Emerson's averaged utility indices for *bison* (we do not, as Prewitt mistakenly asserts, use Binford's caribou indices).

Beyond his criticisms, Prewitt offers a handy summary of Dibble's work and his recollections of the excavations there. He also makes additional assertions we would be delighted to see demonstrated by actual evidence as, for example, his suspicion that the valley floor in Paleoindian times was no more than "2-3 m higher than at present." But what specifically is the "vertical relationship" between the downstream cemented gravels and the site's bedrock? Have those gravels been recorded and mapped directly in the front of the shelter to show their relationship to the shelter floor in Paleoindian time? And the larger question: are those gravels indeed Pleistocene in age (we suspect as

much, as does Prewitt, but none of us has yet demonstrated that)? Ultimately, these questions remain unresolved: as we noted. More data are needed.

And while we are smart enough not to enter a debate with Prewitt about point typology, we would note we are merely following precedent (Bousman et al. 2004:70; Dibble 1968:36) in the mention of Midland and Milnesand points. Moreover, if Prewitt is correct that the point fragment found by Cooper and Byerly (2005) is Plainview, that certainly fits nicely with our interpretation of this being a single component bone bed.

We raised an alternative interpretation of the use of Bonfire Shelter in Paleoindian times. Prewitt is not alone in objecting to it; Bement, who worked at the site in the 1980s, did as well (Bement 2007), and we have responded (Byerly et al. 2007). In that response we also addressed the interpretive problems with the supposedly cultural spoke-like arrangement of bones, and the logical fallacy—which Prewitt also commits—of assuming that because Bonfire Shelter was used as a jump in the Archaic, that it must have been used in the same manner in earlier Paleoindian times. Site use can change over time.

Importantly, we recognize that our alternative interpretation of the shelter's use in Paleoindian times may be correct, but appreciate it could also be wrong. Nor was it our intent to disparage in any way the results of Dibble's landmark excavations, on which we relied heavily in our re-analysis, and could do so only because of the care and thought Dibble and his crew put into that work.

That there is the possibility for an alternative interpretation of site use is hardly unique to Bonfire Shelter; it is true of many sites, including Hudson-Meng, which by more recent excavations and evidence does *not* appear to be a jump kill (Todd and Rapson 1999). Indeed, re-analysis of many sites using techniques unavailable at the time of their original investigations often highlight ambiguity in interpretation (Meltzer 2006). We made an honest

effort to resolve these areas of ambiguity at Bonfire Shelter, but in many instances resolution will require data currently unavailable, as we explicitly discussed. Future work at the site may provide that data. Until then, it is just not enough to conclude, as Prewitt does, that the answer is “pretty simple.” Archeology seldom is.

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