

Like Hobbes' Chimney Birds

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AUTHORS' RESPONSE TO MELLARS AND GRAVINA (*PALEOANTHROPOLOGY* 2008: 43–64)

Mellars and Gravina's reply is little more than a personal attack that reaches paroxysm in its challenging of our professional integrity and scholarly credentials. We believe that such diatribes should have no place in scientific journals. Because our main concern is with the clarification of the real issues at stake in the Grotte des Fées debate, we nevertheless respond, but only to the points of empirical or methodological substance.

We begin by noting that Mellars and Gravina's rhetoric cannot disguise the basic fact that they now accept our main points concerning the Grotte des Fées, namely:

- The radiocarbon-dated bone samples labeled B1–3 come from Delporte's 1962 excavation of deposits located beyond the southern face of his 1953–54 palier sud, i.e., from an area where Delporte himself reported failure to identify interstratification. Artifacts labeled B1–3 in the museum collections include material that is diagnostic of both the Aurignacian and the Châtelperronian, and the faunal remains from B1–3 bags are carnivore-accumulated. Given this context, the dates obtained for B1–3 samples can relate to Châtelperronian occupation, Aurignacian occupation, carnivore denning, or any combination of the three. This is a matter for interpretation, but that such alternatives exist makes at

least one thing clear—the radiocarbon evidence is no proof, let alone conclusive proof, of interstratification.

- Mellars et al. (2007) already had accepted, firstly, that the profiles photographed by Delporte (see Figure 9, p. 10, this volume) correspond to a SW corner of the palier sud, and, secondly, that the photographic evidence showed the deposits in the western face of that corner to be clearly disturbed. Mellars and Gravina also now accept “localized disturbance of the deposits in the uppermost (B1–B3) Chatelperronian levels” of the southern face, and presence of diagnostically Aurignacian items in those B1–B3 levels.

Mellars and Gravina claim that Delporte clearly recognized, and isolated as such, a heavily disturbed area located towards the western face of the palier sud. They provide no evidence, written or graphic, in support of that claim. The reason is simple: none exists. In Delporte's account, the western and southern sides of the palier sud featured the exact same sequence of deposits, with no lateral discontinuity (see Figure 9, p. 10, this volume). If, as Mellars and Gravina insist time and again, Delporte's words and drawings are to be taken as exact and true, then the palier sud stratigraphy was the same throughout, which means that it

was either intact throughout, or disturbed throughout. The photographic evidence supports the latter, not the former.

On the emplacement of Bailleau's excavations, Delporte's account is explicit—Bailleau's excavations were in the area between the palier nord and the palier sud (see quote in note 4, p. 40, this volume). The 1952 trench cut through that area, i.e., it cut through an area previously excavated by Bailleau. Therefore, our twin conclusions that the material recovered in 1952 comes from backfill deposits and that the south face of the 1952 trench (see Figures 6a and 8, pp. 7 and 9, respectively, this volume) records a backfill stratigraphy, not genuine interstratification, are 100% certain. Because Delporte saw in the south face of the palier sud the same stratigraphy as in the south face of the 1952 trench, it follows that the palier sud deposits that he excavated in 1953–54 also were backfill.

Mellars and Gravina find the reasoning we used to arrive at these conclusions to be “extraordinary,” “bizarre,” “remarkable,” “inexplicable,” “incomprehensible,” “convoluted,” “preposterous,” “verbose,” “confusing,” “desperate,” “disturbing,” and a long etc. In fact, we simply make a straightforward application of transitivity—if A=B, and B=C, then A=C.

Mellars and Gravina's problems with logic are compounded with a fundamental incomprehension of even the most basic aspects of the site's topography and excavation history. For instance:

- Mellars and Gravina complain about our “allegation,” exemplified by Figure 16 (see p. 17, this volume), that “bedrock would have outcropped immediately to the west of Bailleau's excavation limits.” Bedrock in that figure is bedrock where placed by Delporte's longitudinal profile (points 9 and 10 of his topography; see Figure 6a, p. 7, this volume). Mellars and Gravina's reconstruction of site history is that Bailleau excavated significant Mousterian deposits in an area where Delporte recorded bedrock at the corresponding elevation.
- Mellars and Gravina's own backdirt model is as follows:

“an unpublished section in Delporte's 1964 site report (see Zilhão et al. Figure 7b and Figure 31, this volume) strongly suggests that Bailleau's backdirt from his 1869 excavations in the ‘foyers’ part of the site was initially dumped inside the cave interior—to a depth of almost two meters—before some of these deposits were subsequently transferred (presumably into the trenches already opened within the foyers area) in order to pursue his excavations into the Mousterian levels within the cave interior, in 1870 and 1871.”

The cave interior that Mellars and Gravina see in those figures is the empty volume created by Delporte's 1954 exploration of the sedimentary fill of a gallery at lower elevation, where he found intact Mousterian deposits. Thus, following Mellars and

Gravina, Bailleau would have dumped his backdirt into a space that was not to be created until 80 years later.

- Contra Mellars and Gravina, Bailleau did excavate into the Mousterian south and east of the limit indicated by the “fouilles Bailleau” caption. This is readily apparent in Delporte's longitudinal profile (see Figure 6a, p. 7, this volume), where, between topographic points 3 and 7, the “déblais” is shown to penetrate below the elevation of the Mousterian/Perigordian interface.
- The real issue at the Grotte des Fées is whether Bailleau did or did not leave substantial, intact Châtelperronian deposits in the foyer area. Mellars and Gravina's Figure 4 (see p. 48, this volume) attempts a reconciliation of the documented extent of Bailleau's excavations in this area with the notion that, in Delporte's time, the palier sud was still intact. In their reconstruction, however, the palier nord (see Figure 8, p. 9, this volume), which Delporte identified as an intact Châtelperronian remnant, is fully within the limits to which, according to Mellars and Gravina, Bailleau's foyer excavation would have been restricted. Put another way, Mellars and Gravina's argument, that Delporte could not possibly have mistaken for intact, deposits that were in fact backfill, is built on the premise that ... Delporte did mistake for intact, deposits that were in fact backfill.

Where issues of methodology are concerned, we reiterate that Mellars and Gravina's main problem is that theirs is essentially an argument from authority. Ours, in contrast, is based on the extensive study of both published literature and field documentation, on the examination of the museum collections, and on verification against the extant site of the inferences derived from those analyses. Moreover, our conclusions take advantage of knowledge accumulated by the fields of Paleolithic Archeology, Geoarcheology and Quaternary Geology since Delporte's 1950s excavations at the site, a knowledge that was unavailable to him and for the lack of which he cannot be blamed. In any case, if authority is to be an issue in this debate, we must then note that the six of us pool together near 200 years of experience in the excavation and field interpretation of sites of this type and time, whereas Mellars and Gravina's combined such experience is, to the best of our knowledge, nil.

The most remarkable aspect of Mellars and Gravina's position, however, is that they are apparently unaware of the fact that their principal argument—Delporte's experience, competence and authority—has already been refuted, 357 years ago now, and by an author with whose work they should be well acquainted. We quote:

“By this it appears how necessary it is for any man that aspires to true knowledge to examine the definitions of former authors; and either to correct them, where they are negligently set down, or to make them himself. For the errors of definitions multiply themselves, according as the reckoning proceeds, and lead men into absurdities,

which at last they see, but cannot avoid, without reckoning anew from the beginning; in which lies the foundation of their errors. From whence it happens that they which trust to books do as they that cast up many little sums into a greater, without considering whether those little sums were rightly cast up or not; and at last finding the error visible, and not mistrusting their first grounds, know not which way to clear themselves, spend time in fluttering over their books; as birds that entering by the chimney, and finding themselves enclosed in a chamber, flutter at the false light of a glass window, for want of wit to consider which way they came in. So that in the right definition of names lies the first use of speech; which is the acquisition of science: and in wrong, or no definitions, lies the first abuse; from which proceed all false and senseless tenets; which make those men that take their instruction from the authority of books, and not from their own meditation, to be as much below the condition of ignorant men as men endued with true science are above it" (Hobbes 1651: 22–23).

Like Hobbes's chimney birds, Mellars and Gravina flutter about the Grotte des Fées, banging their heads against every corner and, in the end, understanding nothing about the site. Their misadventures, however, should not distract readers from why sorting through the excavations of Bailletou and Delporte has taken on importance. The issue of whether Châtelperronian/Aurignacian interstratification is

real has implications for the culture of Neandertals and the nature of the transition to modern humans and the Aurignacian in western Europe. Given the significance of these implications, this is an issue that should only be addressed on the basis of rock-solid evidence. Whatever the pre-19th century stratigraphy of the Grotte des Fées may have been, it should be readily apparent from this exchange that the site is anything but secure and uncontested. Over the past decade, reanalysis by a number of different authors rejected interstratification at the other sites where it had been claimed. There is no escaping the conclusion that the long-term chronological overlap of the Châtelperronian and the Aurignacian remains an unsupported hypothesis.

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