I sincerely appreciate the comments and suggestions of Drs. Newell and Constandse-Westermann. Their criticisms are well taken; in fact I have addressed the issues of Azilian inter-assemblage variability and subsistence strategies in two recent articles (Straus, 1986; n.d.). Although I have excavated significant Azilian deposits at La Riera Cave and Abri Dufaure, I do not pretend to be an Azilian specialist and defer to my Spanish colleague Juan Fernández-Tresguerres, whose monographic review of the subject (1980) is the definitive work on the subject in Cantabrian Spain. I regard my role in the debate as that of the agent provocateur. Ultimately it is unproductive to engage in endless definitional disputes concerning the normative 'identity' of this or that assemblage, so I regard my article as a first attempt at putting the chronostratigraphy of this crucial transitional period in order. My 'bottom-line' criteria for an Azilian assemblage are Azilian harpoons and painted pebbles, but even these fossil directors are sometimes absent, making the distinctions between certain Magdalenian, Azilian and/or Mesolithic assemblages tenuous at best. I deal with these issues further in the articles cited above. Similarly, while I do not believe that the Azilian and Asturian of Cantabria were fully contemporaneous, I do believe that they are partially functional or depositional poses of one and the same adaptive system c. 9500-9000 B.P., and that shellfish (dumped in 'Asturian' concheros) continued to be a supplementary (winter) resource even for Early 'Neolithic' groups in Cantabria (Gonzales Morales, 1982; Deith & Shackleton, 1986).

My point concerning Azilian absolute chronology is that the archaeological taxon is is time-transgressive and straddles the Pleistocene-Holocene boundary as conventionally defined in Southwest Europe by palynologists and geologists. Its technology, albeit simplified, is clearly derived from that of the late Upper Palaeolithic ('Magdalenian') in this region. Yet it grades rather continuously into the regional Mesolithic just as the subsistence strategies, particularly in Cantabria, grade from Upper Palaeolithic to Mesolithic types. I have earlier suggested that in Cantabria, at least, the Azilian represents more in the way of hunting-related activities than does the Asturian, and that, obviously, its sites tend to be further inland and thus higher in elevation. Some sites, like Balma Margineda in Andorra, actually even continue the pattern of specialized ibex-hunting sites extant since Solutrean sites in the Cantabrian Cordillera/Pyrenees.

I appreciate the attempt made by Newell and Constandse-Westermann to distinguish among classes of dating information, and had incorporated some of their suggestions in my table 2. I am, however, perhaps more impressed by the bulk of radiocarbon evidence for post-Pleistocene Azilian sites than are they. I count 18 sites (several with multiple dates) with radiocarbon dates for levels assigned to the Azilian in the Preboreal time range. At Ekain and Margineda these dates are supported by pollen 'dating'; at Pont d'Ambron and Jean Pierre they are supported both palynologically and sedimentologically. The Preboreal dated levels at Los Azules (with incontrovertible Azilian materials in situ) overlie the Dryas III dated levels, so I see no a priori reason for rejecting the former. The site simply has a long 'Azilian' sequence, as did Mas d'Azil and several others. There are, I admit, more problems with the few 'Azilian' levels (Varennes, Pégourié, Zatoya) radiocarbon dated to the Boreal. Further work on Balma Margineda by the Guillaume team should be interesting in this regard. While it is regrettable that there are 'problems' with so many Azilian sites, I hope I have made those clear in my article so that the reader can evaluate each site on its merits and consult the relevant bibliography. Nonetheless it is clear to me that we cannot relegate the whole Azilian phenomenon to the Allerød or even to the Allerød plus Dryas III. Now the business of

*Department of Anthropology, University of New Mexico, Albuquerque, N.Mex. 87131, U.S.A.
understanding the operation of 'Azilian' adaptive systems (in relation to contemporaneous sites not normatively classified as Azilian) must get under­way!

REFERENCES


