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Shoot first, ask questions later: Interpretative narratives of Neanderthal hunting

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ABSTRACT

This paper examines the hunting strategies employed by Neanderthals at a series of kill or near-kill sites from the Middle Palaeolithic of Europe (Mauran, La Borde, Taubach, Zwoleń and Salzgitter Lebenstedt). Using palaeolandscape reconstructions and animal ethology as our context, we adopt a multifaceted approach that views hunting as a *chaîne opératoire* involving the decisions and actions of both the hunter and the hunted, which together help reconstruct a forensic picture of past events as they unfolded. Our conclusions indicate that Neanderthals did not necessarily pre-select individuals from a herd, who they then isolated, pursued and killed, but rather ambushed whole groups, which they slaughtered indiscriminately. There is strong evidence, however, that Neanderthals were highly selective in the carcasses they then chose to process. Our conclusions suggest that Neanderthals were excellent tacticians, casual executioners and discerning diners.

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1. Introduction: the genuine palaeodiet

The reconstruction of Neanderthal diet is currently undergoing something of a revolution. In addition to traditional methods of archaeozoological analysis of Middle Palaeolithic faunal assemblages, supplemented since the mid 1990s by the isotopic analysis of Neanderthal remains (Drucker and Bocherens, 2004. Bocherens et al., 2001, 2005; Richards et al., 2000, 2001; Richards and Trinkaus, 2009), identifications of animal and plant residues on Neanderthal teeth and Middle Palaeolithic stone tools are now being rolled out (Hardy et al., 2012; Henry et al., 2011). A picture is emerging of regional dietary variability (Bar-Yosef, 2004; Burke, 2000, 2004. Steele, 2004), with Neanderthals showing sufficient flexibility to exploit locally available animal and plant resources as they became seasonally available (e.g., Stiner, 1994; Gaudzinski, 1996, 2006), including slow and fast moving small animals (Stiner, 2002; Blasco, 2008) and lesser, but at times not insignificant, amounts of aquatic, marine, avian and plant elements (Barton, 2000; Blasco and Férnandez Peris, 2009; Hardy and Moncel, 2011; Henry et al., 2011; Hardy et al., 2012). Indeed, it now seems clear

* Corresponding author. E-mail address: mark.white@durham.ac.uk (M. White). that in some regions of Europe and during certain seasons Neanderthal diets could be described as broad spectrum, at least in southern Europe (Gaudzinski-Windheuser and Kindler 2012, 62).

This maturing picture builds on two decades of research that saw dramatic changes in our appreciation of Neanderthal hunting. After many years of being characterised as predominantly, if not obligate, scavengers (e.g. Binford, 1981, 1984, 1985; Stiner, 1991, 1994), Neanderthals have come to be seen as capable hunters, even top-level carnivores, possessing similar capabilities in the hunting realm as Homo sapiens. As noted by Gaudzinski-Windheuser and Kindler (2012, 60), the discovery of preserved wooden spears at the late Middle Pleistocene site of Schöningen (Germany) effectively ended a research paradigm in which the 'hunter or scavenger' dichotomy was a major issue for debate. It has simply been assumed since that Neanderthals were (or perhaps could be is a better term) efficient hunters of large mammals. The abundance of large animal remains and stone tools from over half of the known European Middle Palaeolithic sites, age profiles of taxa present and the ubiquity of cutmarks and other signs of processing of these remains 'indicate that Middle Palaeolithic humans at times enjoyed uninhibited access to large game, apparently by hunting them' (Stiner, 2002, 17). As Burke succinctly put it, "the issue today is not whether Middle Palaeolithic people could hunt,







but rather *when* and *how* they chose to hunt" (2000, 281 emphases original). Some of the best evidence comes from sites where the faunal assemblage takes a monospecific form—i.e. the record is dominated by a single taxon, often with large numbers of individuals present. These become more common from Marine Oxygen Isotope Stage (MIS)9 or MIS7 onwards and particularly from MIS5e (Gaudzinski, 1996, 1999a, 1999b, 2006; papers in Burke, 2000, 2004; Rodríguez-Hidalgo et al., 2015). The taxa involved are diverse and include equids (Conard and Prindiville, 2000, Patou-Mathis, 2004; Schild, 2006), rhinoceros (Bratlund, 1999), reindeer (Gaudzinski and Roebroeks, 2000), bovids (Farizy et al., 1994; Jaubert et al., 1990; Gaudzinski, 1996, 2006), red deer (Conard and Prindiville, 2000; Fiore et al., 2004; Steele, 2004; Valensi, 2000; Valensi and Psathi, 2004), caprids (Fiore et al., 2004) and gazelle (Rabinovich and Hovers, 2004).

The regularity of monospecific faunal assemblages in the Middle Palaeolithic strongly invokes Neanderthals as the prime accumulator (Gaudzinski, 2006), and the predominance of a single species has led to the logical assumption that at these sites, or at least very close by, Neanderthals were selectively hunting these animals (e.g. Drucker and Bocherens, 2004. Fiore et al., 2004). Furthermore, where the death profiles of the animals reveal a bias towards a certain age/sex class-e.g. adult male reindeer at Salzgitter-Lebenstedt - it is further assumed that Neanderthals were deliberately targeting and selectively taking specific *individuals* within the group (e.g. Patou-Mathis, 2000; Gaudzinski and Roebroeks, 2000). The resulting picture is of a selective hunting strategy, involving tactical planning about the seasonal availability of certain taxa at specific points in the landscape, and regular 'on the spot' decision making about which specific individuals were to be targeted, presumably in order to maximise gain rather than to minimise risk. Any major differences that do exist between modern human hunting and Neanderthal have yet to be fully ascertained, although many have speculated that Homo sapiens' superior 'killing-at-a-distance' weapons systems (and upper body morphology) gave them a selective edge in the evolutionary arms race (Churchill, 1993; Strauss 1993; Shea, 2006; Rhodes and Churchill, 2009; Churchill and Rhodes, 2009).

Here, we are not concerned with comparing behaviours over the Middle to Upper Palaeolithic transition, a task that is rarely undertaken impartially. Instead we take a critical look at the question of *how* Neanderthals hunted, a topic often considered it too speculative. Indeed, Gaudzinski-Windheuser and Kindler (2012) have lamented the loss of a holistic approach to Neanderthal subsistence strategies, resulting in the current failure of archaeozoology to provide a comprehensive picture of the social organisation of Neanderthal hunting, the consequence of which is that 'the Neanderthals' way of life remains ambiguous and bloodless' (Gaudzinski-Windheuser and Kindler, 2012, 66). Here, we focus solely on the few well-studied European kill sites and adopt a multifaceted approach that views hunting as a *chaîne opératoire* involving the decisions of both the hunter and the hunted, which together help reconstruct a picture of past events as they unfolded.

2. Towards a chaîne opératoire of Middle Palaeolithic hunting

Many European Middle Palaeolithic faunal assemblages derive from caves. Although these often provide large and discrete stratified samples, which zooarchaeologists have become very adept at reading, we suggest that they are in some respects rather ill-suited to the questions they have traditionally been used to answer—i.e. hunting practices. This is because, as is well acknowledged, they are often taxonomically diverse and time-averaged palimpsests accumulated over unknown millennia, involve multiple human and non-human agents, and are taphonomically and culturally sorted. In human terms, they provide poorer evidence on procurement and much better information on the transport of anatomical elements, species availability and, in spatial terms, 'housekeeping'. They usually lie, therefore, at the distal end of a complex chaîne opératoire of carcass procurement, use and disposal, leaving Neanderthal decision-making in the earlier stages little more than a rather distant memory. Many, furthermore, were excavated and curated using techniques and recording procedures that preclude a precise understanding of what was originally present, let alone its behavioural significance. This can lead to a multiplicity of equifinite interpretations for the same site, as epitomised by debate surrounding the Combe Grenal rockshelter (Chase vs Mellars vs Binford, summarised in Mellars, 1996) amongst many others. (This, of course, is not unique to cave assemblages, as the debates surrounding Middle Pleistocene elephant hunting at Torralba and Ambrona (Binford, 1987), and the various interpretations of the Late Pliocene and Lower Pleistocene clusters at Olduvai and Koobi Foora demonstrate (Binford, 1985)).

Our approach is based on narrative and focuses on the proximal end of the chaîne opératoire, using archaeological assemblages from death- or kill-sites. These sites sample more discrete time periods than the 'usual' cave assemblages, and preserve a more even representation of the animals killed at the locale, thus providing the most reliable information on Neanderthal hunting practices and on any deliberate prey selection that may have taken place. Their other advantage is that they enable the reconstruction of the precise landscape settings in which Neanderthals hunted-providing key insights into topographical features that could have been used to gain the upper hand in disadvantaging prey – and often the season/ s of the hunt. Of equal importance is the acknowledgement that the Neanderthal hunter was only one of the agents in the chase, and that their prey had very different priorities, to protect and survive. To this end, we deploy ethological information from the hunted species, drawing on their social ecology, life histories, sensory acumen, aggressiveness and flight behaviour, to help understand the size and social make-up of the groups tackled, and how the individual members might be expected to react under pressure. Where the hunted species is now extinct, we use data from a range of living representatives to explore context-relevant family level commonalities. In sum, using the faunal chaîne taphonomique in the light of such ethological information, we attempt to reconstruct Neanderthal hunting as it happened during the hunt. Only by adopting this holistic perspective and narrative structure can we really hope to understand how Neanderthals hunted, and reveal how these practices affected the patterns seen in their domestic settings.

We approach the issue through five case studies. These are formed of well-excavated, well-understood faunal assemblages that have been posited as evidence of selective hunting strategies.

3. BISON: Mauran, France, MIS5a

Mauran is situated on a low (50 m) terrace of the Garonne River in the foothills of the French Pyrenees. The archaeological horizon was located ~4 m below ground level and comprised ~30 cm of slope deposits (clayey-silts containing limestone blocks) underlain by fluvial sediments (Farizy et al., 1994). The site lies on the plateau above the Garonne and Volp rivers, palaeolandscape reconstructions suggesting that the kills took place at the end of a small gully bounded by limestone escarpments. Pollen evidence indicates that the site was used during a period of cold, dry climate, while morphometric data on horse and bison suggest correlation with MIS5a. Some 2450 artefacts and 4193 mammalian remains were recovered from an excavated area of just 25 m²; based on the ground-truthed extent of remaining deposits to the south, east and Download English Version:

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