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The last hunter-gatherers of China and Africa: A life amongst pastoralists and farmers

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ABSTRACT

The transition to farming is often written in the language of progress. The search has been for the oldest sedentary farming settlements, the processes of plant and animals domestication and the profound societal alterations that accompanied the choice to change lifeway. Perhaps because most of us come from long-standing farmer ancestry, we tend to assume that farming is a superior and more secure way of life. Is there any data to support this? Evidence from southern Africa since the 1970s has shown that the Kalahari hunter-gatherers living in what is a comparatively harsh environment have/had a relatively easier life, with considerably more leisure time and a longer life expectancy than those living in early farmer groups (Lee and DeVore, 1976). Many hunter-gatherers in East Asia will have had even more comfortable and leisure filled lives than those of the Kalahari Bushmen. It is therefore important to ask the question as to why East Asian hunter-gatherers took up farming and whether all hunter-gatherer groups made this choice swiftly and willingly. I use evidence from studies into hunter-gatherer interactions with farmers in sub-saharan Africa to consider this question. It was originally hoped that groups such as the Bushmen of southern Africa, the Pygmies of central Africa and the Hadza/Sandawe of East Africa could give us glimpses into a universal hunter-gatherer past. Revisionist studies since the 1970s have sought to undermine this hope and have emphasised that early research recorded the end product of at least two millennia of interaction, influence and change from being amongst pastoralists and farmers. Archaeology has made significant contributions to this debate, providing evidence for the nature and extent of interaction, continuity and change. Today we are therefore well-positioned to consider the specifics of how hunter-gatherer groups responded to the coming of livestock keepers and farmers in different parts of Africa. This paper will review African interaction models so as to consider their implications for East Asia. I do not provide a general model for interaction, indeed I would be ideologically opposed to any attempt at this kind of universalism, but I seek to provide a convincing glimpse of the kinds of real-world complexity and contextuality in the choices made by East Asian hunter-gatherers in their responses to the presence and influence of farmers.

1. The origins of farming in East Asia: context and change

If we are truly to understand the transition to early farming in the Yangzi and Yellow river basins we need to understand the processes that led to increasing sedentism and food production in this region some 9000 years ago. East Asian archaeology does not explain the origins of agriculture in terms of demic diffusion (Chang, 1986; Bellwood, 2005). Instead most East Asian archaeologists argue, in both the Yangzi and Yellow river basins, for a relatively slow in situ developmental shift from a mobile life of hunter-gathering to an increasingly sedentary life in which food production played an ever more important role over a period of millennia (e.g. Shi, 1992; Zhao, 1998). So, in the Yangzi and Yellow river basins, the two areas most suitable to permanent agriculture, hunter-gatherer populations gradually chose to give up their former way of life in favour of plant domestication and animal husbandry. I am not concerned here with the debates around the possible cross influence between agriculturists in the two valleys, what interests me is why hunter-gatherers in these areas, who had successfully practised a hunter-gatherer way of life for tens of

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thousands of years, chose to change.

There are some stock answers provided by archaeologists to this question and they show remarkable congruence with the explanations used to explain the development of agriculture in the so-called 'Fertile Crescent' of South-West Asia. In both places people have pointed out that the development of agriculture was made possible by the formation of rich alluvial terraces in the early postglacial period alongside a set of favourable, warm and stable climatic conditions. At its simplest, these factors are argued to have provided uniquely rich foraging environments both in China and the Fertile Crescent in which intensification (e.g. of nut, tuber collection), food storage and growing sedentism all became possible (Bellwood, 2005; Liu and Chen 2012). These factors brought unprecedented population aggregations, forcing a greater complexity in the social relations of production and thereby exerting pressure towards plant domestication and animal husbandry. Whilst social factors such as technological developments for resource management and food storage are acknowledged, the primary drivers are typically presented as the overarching climatic/environmental context (Childe, 1936; Braidwood, 1960; Bar-Yosef, 1998; Liu and Chen 2012).

A few have argued for more refined social explanations in South-West Asia. Brian Hayden (1992), for example, suggested that agriculture was a by-product of ritual feasting, an explanation supported by recent finds from Göbekli Tepe (Schmidt, 2000). Ian Hodder (1990) saw agriculture as the natural solution to the long-term battle to protect and isolate humanity from wild nature. In this view, efforts to tame the wild logically led to the bringing of plants and animals from the 'outside' to the 'inside'. Nature was therefore progressively enculturated and brought into household architecture and art. In this way its threatening power was harnessed for social purpose. This explanation underplays the ample evidence for deeper-time enculturation of nature by hunter-gatherers, for example a key feature of animism is to create a 'society of nature', but I am sympathetic to Hodder's aim to find a social explanation, because, whilst both environmental and economic conditions provide the context for change, they do not in themselves explain the change. They are simply the setting in which groups of former hunter-gatherers chose to change their lifeway. The cause of the change is not self-evident from the change in environmental/economic context. Opportunity should not be mistaken as cause. Hayden and Hodder, and others in their vein, are seeking the cause within our understanding of the social context. The problem of long-term archaeological studies falling prey to environmentally deterministic and ecologically functionalist explanations is a widespread one. The excuse that this is unavoidable in long-term archaeological studies has been ably rebuffed by Geoff Bailey (2007) through his discussion of time perspectivism. Bailey demonstrates that working at different scales of time requires different approaches, but it should "not remove consideration of social factors" (Bailey, 2007: 201).

Another example of a social explanation is the work of Jacques Cauvin (2000) who has argued that agriculture was an outcome of a shift in cultural and cognitive values towards a new ideology. He sees the move away from animism towards divinities in human form, with human symbolism, as the fundamental transition that allowed for domestication and agriculture. The new symbolism emphasised human sacrifice, violence, virility, high status objects, weaponry and this became integrated into collective ritual buildings. He provided evidence of this in major symbolic shifts prior to the adoption of agriculture (and see Lewis-Williams, 2004). The recent findings at Göbekli Tepe have offered independent support for Cauvin's views (Schmidt, 2010). The fact that these cultural shifts predate the beginning of agriculture fundamentally undermines older co-evolutionary ideas that cultural shifts were the product of agriculture and the need for ordered, differentiated relationships upon which an enduring agricultural economy can thrive (Woodburn, 1982). The work of Cauvin changes our understanding of the beginnings of agriculture in South-West Asia in that it exposes social and, in particular, symbolic changes that immediately predate the shift to agriculture. But, just like the environmental context, this provides the conditions within which change occurred, not necessarily the cause.

In China we do not yet have this level of social/symbolic analysis and so there are no equivalent explanations comparable to those of Hodder, Hayden and Cauvin. Unlike the environmental explanations where similar factors pertained in both regions, the social explanations are inherently local and specific. The South-West Asian explanations cannot be transported across space; they have no relevance in China. This is surely the next frontier for Chinese research into the origins of agriculture. The archaeological evidence suggests the answers will be complex. The process of the transition towards agriculture is highly variable between localities. One common feature is that the shift was gradual rather than momentous: there was a long transition period of many centuries in which plant domestication and animal husbandry continued to play second fiddle to the hunter-gathering. The social processes will therefore also have been long, providing more chance that they left evidence for analysis. In advance of a detailed analysis of this kind, another way of considering the problem is to ask the question why so few East Asian hunter-gatherer groups took up farming and why the majority chose not to. The origins points in both Eastern Asia and Western Asia are fairly tightly contained and, in both regions, agriculture steadily spread outwards from these origin points. In both areas Bellwood argues that "agriculture spread in Neolithic/Formative circumstances mainly because the cultural and linguistic descendants of the early cultivators increased their demographic profiles and pushed their cultural and linguistic boundaries outwards" (Bellwood, 2005: 42). He emphasises farmer boundary expansion rather than older conceptions of hunter-gatherers being converted as waves of missionizing farmers reached them (and see Lu, 2009). This shift in emphasis addresses new understandings of the complex reasons why most hunter-gatherer groups, where they had the choice, probably resisted or rejected the adoption of farming (Bellwood, 2005: 28–43). It also takes us past the cultural assumption that farming is a 'better' way of life and therefore a natural and obvious choice for hunter-gatherers, an assumption long recognised as problematic (e.g. see Zvelebil and Rowley-Conwy, 1984).

We see this new understanding woven into recent writings on the spread of farming across Western Europe. Whilst a complex palimpsest of demic and cultural diffusion underlies the expansion of the farming frontier (Chikhi et al., 2002; Rowley-Conwy, 2004; Bellwood, 2005; Bramanti et al., 2009; Hervella et al., 2012; Skoglund et al., 2012; Gallagher et al., 2015), genetic and archaeological evidence have been brought to bear to demonstrate that many hunter-gatherer groups resisted absorption within farmer linguistic and cultural boundaries. We have fascinating glimpses of hunter-gatherers living independently alongside and interacting with farmers for thousands of years (e.g. Bollongino et al., 2013). Whilst the European record is instructive, and aspects of it may hold relevance for East Asia, the processes are too buried in time to allow us anything more than glimpses into their complexity. A better grasp of the complexity can be gained from sub-Saharan Africa where these processes have been observed and recorded for nearly two centuries and can still be seen in action today.

2. Bushmen groups amongst farmers in Southern Africa

Sub-Equatorial Africa continued to be dominated by people

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