Modern humanity’s battle with Neanderthals may have been won by the women who invented the division of labour

NEANDERTHAL man was a strong, large-brained, skilful big-game hunter who had survived for more than 200,000 years in the harsh European climates of the last Ice Age. But within a few thousand years of the arrival of modern humans in the continent, he was extinct. Why that happened is a matter of abiding interest to anthropologically inclined descendants of those interloping moderns. The extinction of Neanderthal man has been attributed variously to his having lower intelligence than modern humans, to worse language skills, to cruder tools, or even to the lack of a propensity for long-distance trade. The latest proposal, though, is that it is not so much Neanderthal man that was to blame, as modern woman.

In existing pre-agricultural societies there is, famously, a division of food-acquiring labour between men, who hunt, and women, who gather. And in a paper just published in Current Anthropology, Steven Kuhn and Mary Stiner of the University of Arizona, propose that this division of labour happened early in the species’ history, and that it is what enabled modern humans to expand their population at the expense of Neanderthals.

As Adam Smith noted, division of labour leads to greater productivity because it allows people to specialise and become very good at what they do. In the vast majority of cases among historically known and present-day foragers, men specialise in hunting big game, while women hunt smaller animals and collect plant food. In colder climes, where long winters make plant-gathering difficult or impossible for much of the year, women often specialise in making clothing and shelters.

The archaeological record, however, shows few signs of any specialisation among the Neanderthals from their appearance about 250,000 years ago to their disappearance 30,000 years ago. Instead, they did one thing almost to the exclusion of all else: they hunted big game. There are plenty of collections of bones from animals such as reindeer, horses, bison and mammoths that are associated with Neanderthals, but few remains of rabbits or tortoises. There is also little sign of preserved seeds and nuts, or of the specialised grinding stones that would have been needed to process them. And there are no bone awls or needles that would suggest that Neanderthals were skilled leather workers, despite the abundance of animal skins that their hunting would have provided.

Signs of division of labour come only with the arrival of modern humans into Europe around 40,000 years ago. That is when evidence appears of small animals being eaten routinely and plant foods being gathered. It is also when tools designed for sophisticated leather working emerge.

Dr Kuhn and Dr Stiner suggest that division of labour actually originated in a warmer part of the world--Africa seems most likely--where plant foods could be gathered profitably all year round. But as humans brought the idea of division of labour north, the female side of the bargain gave the species a significant advantage by providing fallback foods when big game was scarce and allowing more people to inhabit a given piece of land in times of plenty. Modern human populations grew, Neanderthal populations shrank, and the rest is prehistory.

Of course, the archaeological record cannot prove which sex was doing what, or even if specialisation was determined by sex at all. But almost all known groups of foragers divide men’s and women’s work the same way, which makes it likely that the same rule applied in the past, and for the same reasons--men tend to be stronger and faster, and women are more likely to be occupied with childcare.

That it was division of labour which gave modern humanity its edge over the Neanderthals is not a completely new idea. A study published last year by Jason Shogren of the University of Wyoming used a mathematical model to suggest it would work, particularly if combined with trade. But Dr Shogren’s thesis was that wimpy, useless hunters were the ones who stayed at home and crafted objects, while the real men went out and killed things. Dr Kuhn and Dr Stiner, by contrast, assign to women the main role in establishing the antecedents of modern economics, and thus launching the process of growth that continues to this day.