A systematic review of post-marital residence patterns in prehistoric hunter-gatherers

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Post-marital residence patterns influence social organization and behavior, and consequently they have been a foundational concern in anthropology. Anthropologists' views of residence patterns have shifted dramatically over time. In the 1860s, the prevailing view was that matrilocality (married couple lives in wife's community) was the ancestral state. By the 1920s, the dominant belief among anthropologists was that patrilocality (married couple lives in husband's community) was the aboriginal pattern. Patrilocality or some combination of residence patterns is probably the most accepted opinion today about prehistoric hunter-gathers' residence patterns. Despite changes in their views, anthropologists have consistently relied on ethnographies of modern, post-contact hunter-gatherers to extrapolate into the past.

I conducted a systematic review of post-marital residence patterns in prehistoric hunter-gatherers to compile direct evidence on the matter. I focused on studies of strontium isotope ratios and mitochondrial DNA (mtDNA) in the remains of prehistoric hunter-gatherers. A strontium isotope ratio in dental enamel serves as a geochemical signature of an individual's childhood community. This ratio can be compared with the ratio for a burial site and its vicinity to estimate whether an adult individual is a local or immigrated to the area after childhood. mtDNA is maternally inherited and thus can be used to describe matrilineages. Post-marital residence patterns can be inferred from several kinds of comparisons between women and men within and between communities in terms of the similarity of their mtDNA.

I searched Scopus, Google Scholar, and many other databases for relevant research. I inspected the titles and abstracts of more than 5,000 reports, and screened 200 full reports for possible inclusion. I included reports on 24 burial sites (7 strontium isotope studies and 18 mtDNA studies) involving 377 individuals. The burial sites represent four continents and date from 9,605 to 290 years before present. I summarized the results of these studies meta-analytically, where possible, with random effects models. I also critically reviewed the results from studies of 26 extinct hominins involving strontium isotope and mtDNA methods.

Although these studies have many limitations, the evidence taken together suggests that endogamy (marriages within the burial community) was the norm in prehistoric hunter-gatherers, and that exogamous marriages showed matrilocal tendencies. I speculate that these patterns stem from evolved psychological mechanisms related to long-term mating.