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## Human-environment interactions in arid Australia: a geoarchaeological approach

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The conventional approach to assessing the archaeological record in semi-arid regions of many parts of the world involves extensive survey of surface deposits thought to indicate the use of space by past peoples. However, such interpretations require a detailed understanding not only of how these deposits formed but also why they have survived. In summarizing more than a decade of research in western New South Wales, Australia, we argue that over much of semi-arid and arid Australia, archaeological 'sites' are, in fact, accretion phenomena (or 'palimpsests') that are not easily interpreted as the outcome of short-term behavioural events. Moreover, while the desert landscapes may appear to be unchanging, there is considerable variability in landsurface age, and hence the 'availability' of archaeological surfaces. It cannot be assumed that stone artefact deposits, for example, from a similar location are of a similar age. To make behavioural inferences from these records, an approach is needed based on a geoarchaeological assessment of landscape potential, analyses able to detect human responses to environmental change, and analyses of artefacts that emphasise mobility rather than static settlement patterns. Landscape, paleoenvironmental and artifact assemblage data from our field area will be presented that demonstrates episodic occupation by highly mobile groups of people, most likely reacting to environmental changes and resource availability.