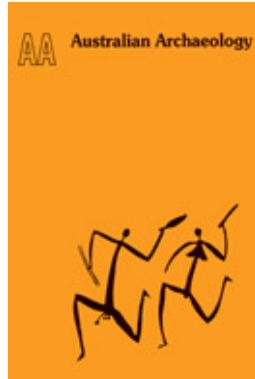


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BACKED BLADES IN NORTHERN AUSTRALIA : EVIDENCE FROM
NORTHWEST QUEENSLAND

Peter Hiscock and P.J. Hughes

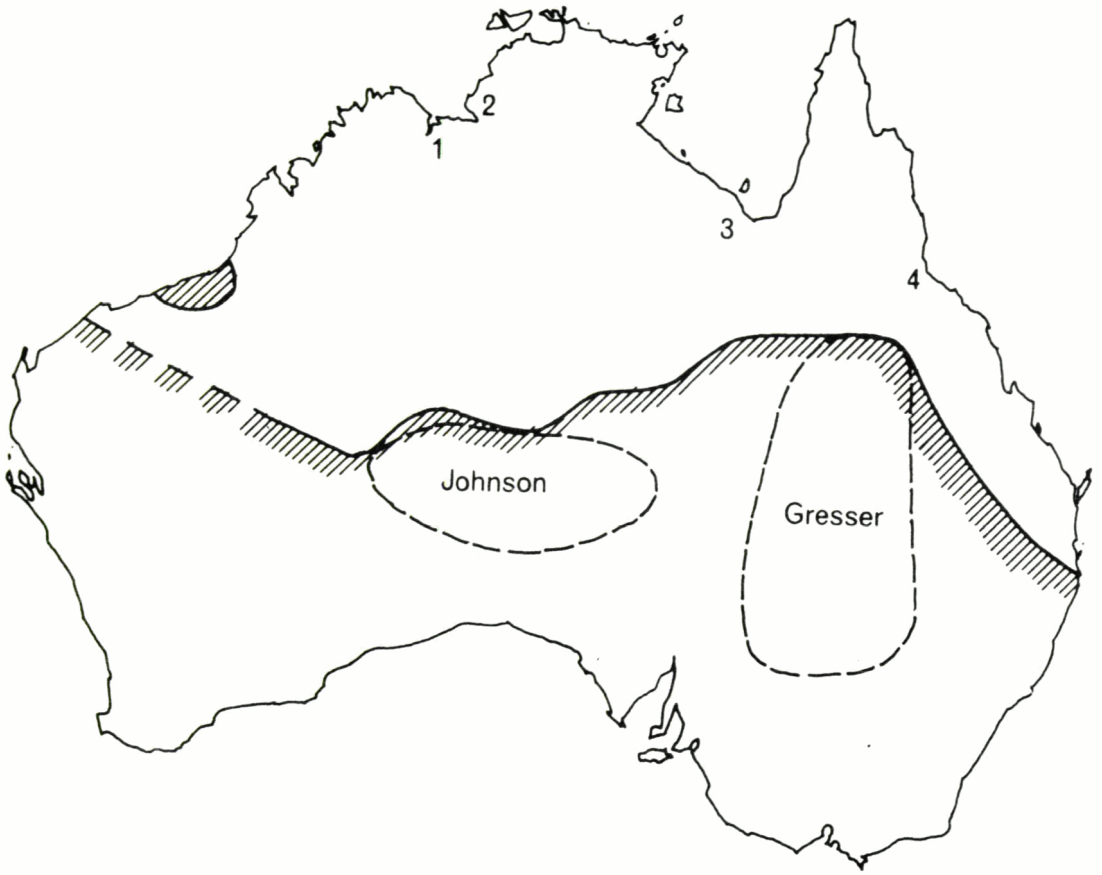
One of the tenets of Australian archaeology is that there are certain artefact types for which archetypes and their distribution patterns have been confidently established. An example of this is the long-held belief that backed blades are only to be found in the southern two-thirds of this continent. Recent research in tropical Australia shows this not to be the case.

In June 1979 Phil Hughes and Ken Aplin, along with honorary wardens from the archaeological branch of the Department of Aboriginal and Islanders Advancement based at Mount Isa, undertook an archaeological reconnaissance of the Lawn Hills-Colless Creek gorge area of northwest Queensland (Fig 1). This study was undertaken for the DAIA on a grant from the National Estate Grants Program. This area is strategically placed from an archaeological point of view in that it lies well within that vast expanse of inland tropical Australia about which little is known. From an archaeological standpoint the nearest comparatively well known regions are the Top End of the Northern Territory 800km to the northwest, the eastern side of Cape York 750km to the east-northeast and the southern highlands of Queensland 1200km to the southeast.


In the course of this reconnaissance, Hughes and Aplin excavated four test squares, each 50cm square, in a dolomite shelter on Colless Creek (Figs 2 and 3). Analysis of the extremely rich chipped stone assemblage recovered from this site (Colless Creek 1 - DAIA site no. AL-All) is being undertaken by Peter Hiscock. On the basis of sorting and a preliminary examination of this material it has become clear that this assemblage will provide valuable data not only in establishing a local sequence but for Australia-wide comparisons. One discovery, the presence of backed blades in the deposit, is the subject of this note.

Four definite backed blades, and one which is possibly backed, were recovered from the deposit at Colless Creek 1. Three of the four squares excavated appear to have a continuous sequence that extends up to recent times. The fourth, square Q, has been truncated by animal disturbance and only the lowermost unit is represented (Fig.3). In each of the squares, other than Q, backed blades were recovered only from spit 2 which on average lay between 2 and 5cm below the surface (Fig.3). Four preliminary C14 dates, three on charcoal and one on freshwater shell, have been obtained from spits 2, 3 and 4 in square P. The charcoal dates range from 700 to 300BP with increasing depth. The shell date, from spit 2, lies between 4000 and 5000BP. Another sample of shell has been submitted to try and resolve these inconsistencies in dating.

The backed blades are illustrated in Figure 4 and described below.



1 Ord Valley sites 2 Yarar 3 Colless Creek 4 Jourama

 Hypothesised northern boundary of Backed Blades (after Mulvaney 1975:224- 25 and Kamminga 1978 : 322)


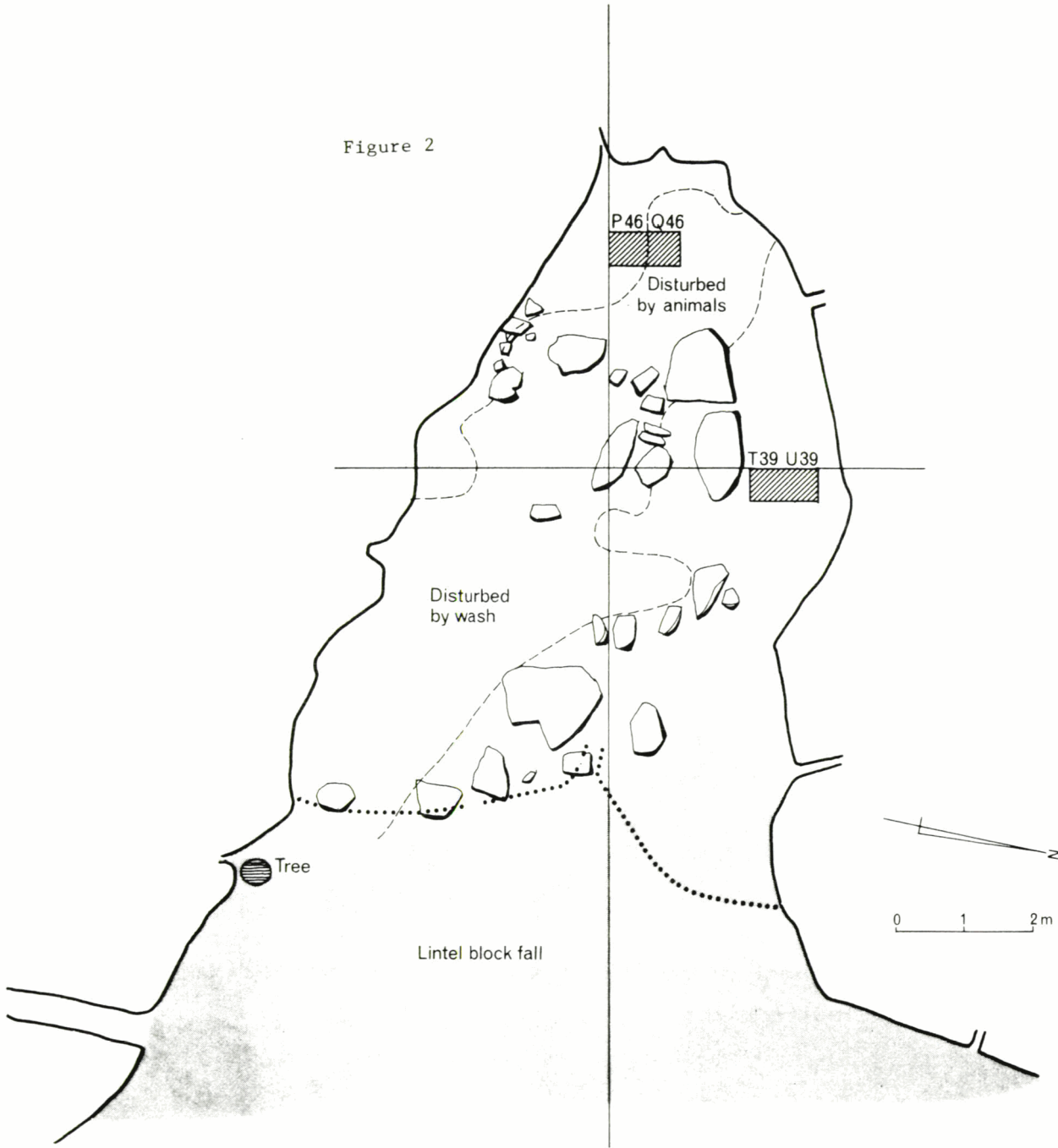
 Rough limits of early surveys

Figure 1

Figure 2



P46/2-1 Definite Backed Blade (Geometric in form). The two backed margins are bidirectionally struck (i.e. from both dorsal and ventral surfaces) along their entire length. It is likely that this artefact was backed using bipolar techniques. As there are no platform, PFA (point of force application) traits, or dorsal ridges present there is little indication as to which is the ventral surface. The two concave backed edges are unusual and presumably cautious backing was required to produce them. Along most of the chord, edge damage is present in the form of small (less than 1mm) flake scars. Maximum Length = 1.9cm. Chord Length = 1.9cm

P46/2-2 Probable but not definite backed blade. This piece is the broken (distal?) end of a flake. One margin contains steep unidirectional negative flake scars, about 1-3mm long but not reaching to the opposite surface. Because both faces are flat and bear no indication of which was ventral and which dorsal it cannot be definitely stated that the negative scars on the margin occurred after detachment of the flake, thereby constituting retouch. It is possible therefore that this is a resharpening or redirecting flake, as both these forms occur in the assemblage. From its shape, and the pattern of the scars on the margin, it is thought that this specimen may well be a backed blade type, albeit broken. Maximum Length = 1.2cm. Chord Length = 0.9cm.

U39/2-1 Definite Backed Blade (Geometric in form). Unlike the previous specimen this is comparable to the archetypes illustrated in the literature. It is unidirectionally struck from the ventral face along both backed edges. On one of the backed edges crushing is visible on the dorsal edge. This is likely to have resulted from knapping the artefact while it rested on an anvil. Backing is therefore, in part at least, likely to have been bipolar. The ventral surface is reasonably flat and contains no remnant platforms or PFA features. On the dorsal surface, however, one dorsal scar runs parallel to the chord. Maximum Length = 1.6cm Chord Length = 1.6cm

T39/2-1 Definite Backed Blade (Asymmetric - though possibly a worked down or repaired specimen originally more geometric). Unidirectional backing originates from the ventral face, though the negative scars do not reach the dorsal surface. No dorsal ridges or other dorsal features exist. The ventral surface, on the other hand, retains bulbar and remnant platform characters. Edge damage occurs on the chord, though not along its entire length. Maximum Length = 1.4cm Chord Length = 1.0cm

T39/2-2 Definite Backed Blade (Asymmetric though again broken). Bidirectional backing occurs along most of the margin. Dorsally derived scars dominate towards the distal end, and there the ventral edge is mainly crushed and shattered. Again the possibility is that bipolar working is demonstrated. Platform and PFA features are absent from the specimen and the proximal end is shattered on both dorsal and ventral surfaces. Maximum Length = 1.7cm Chord Length = 1.7cm.

Approximately one cubic metre of the deposit was dug in all. Whilst only five backed blades were found this represents a high density as all were recovered from spit 2 which is on average only 3cm thick. The density of backed blades in spit 2 in all three squares is about 200 per cubic metre. Put another way, there are on average seven backed blades per square metre of surface. As the total surface area of the site is about 60 square metres there might well be more than 400 backed blades in the whole site. The site is,

however, characterized by a low number of retouched artefacts. The only other readily recognized types found in situ were a small number of probable butts of pirri points and these all came from spits 1 and 2. The upper three spits in each square contain a chipped stone assemblage that differs noticeably from the lower material. On this basis, and particularly on the distribution of backed blades and pirri points, we surmise that the top 8cm or so of the deposit is equivalent in age to the 'small tool tradition' found elsewhere. More detailed stone analysis will be reported at a later date.

A number of open surface sites were reported from along Colless and Lawn Hill Creeks in the 1979 field season which appear to have numerous retouched artefacts including tulas and pirri points. No backed blades were seen on these open sites. These observations need to be verified by systematic recording of these sites before any conclusions can be drawn; and to this end we revisited the region in April 1980. On surface sites on Colless Creek, on the O'Shannessy River 70km to the southeast, and around outlies on the Carpentarian Plain between them backed blades were found. We collected seven archetypal specimens on six sites in these three areas; and five less classic/unfinished specimens on these and other sites. Six out of the seven archetypal specimens are again geometric in form and have edge damage on the 'chord'. Other unexpected specimens were found in the area during the 1979 survey, including a juan knife which is of particular interest given the close morphological resemblance between such artefacts and backed blades.

The presence of backed blades in the Colless Creek area, well to the north of the generally accepted limit of this implement type, has important implications for inferences commonly drawn on the basis of their supposed distribution (Fig.1). Recent syntheses continue to espouse the reality of this northern boundary (cf. Mulvaney 1975:224-225; Kamminga 1978:321-322; Jones 1979:457; White and O'Connell 1979:26). The basis of the accepted distribution of backed blades are data gathered from a small number of excavated sites in the northern half of the continent, most in the last decade or so, and an even smaller number of surveys of surface sites, albeit extensive, undertaken before the 1960's. The northernmost extent of backed blades, in central Queensland, corresponds to the northern limit of Gresser's (1962, 1963a, 1963b, 1964) survey area which extended through NSW and into Queensland as far north as Hughenden and Cloncurry. Similarly Johnson's (1963, 1964) survey in central Australia accounts for our knowledge of backed blades south of the supposed boundary in that area simply because he did not extend his survey area any further north (see also Stockton 1971). These surveys by Gresser and Johnson mark the extent of the data on which the distribution of backed blades have been based.

Excavation of sites in northern Northern Territory, NSW, and in southern Queensland (plus isolated sites such as Laura in northeast Queensland) appear to have substantiated this view. The Northern Territory sites dug so far are reported to have contained no backed blades (however see below) whereas many sites at the opposite end of the continent have produced prolific numbers of backed blades. The presence of backed blades in sites in Arnhemland has been reported only once in the literature (Gould 1973:18), but according to C. Schrire (pers. comm.) this claim can be discounted. Nevertheless as most of the Northern Territory has not yet been systematically surveyed the absence of backed blades may be more apparent than

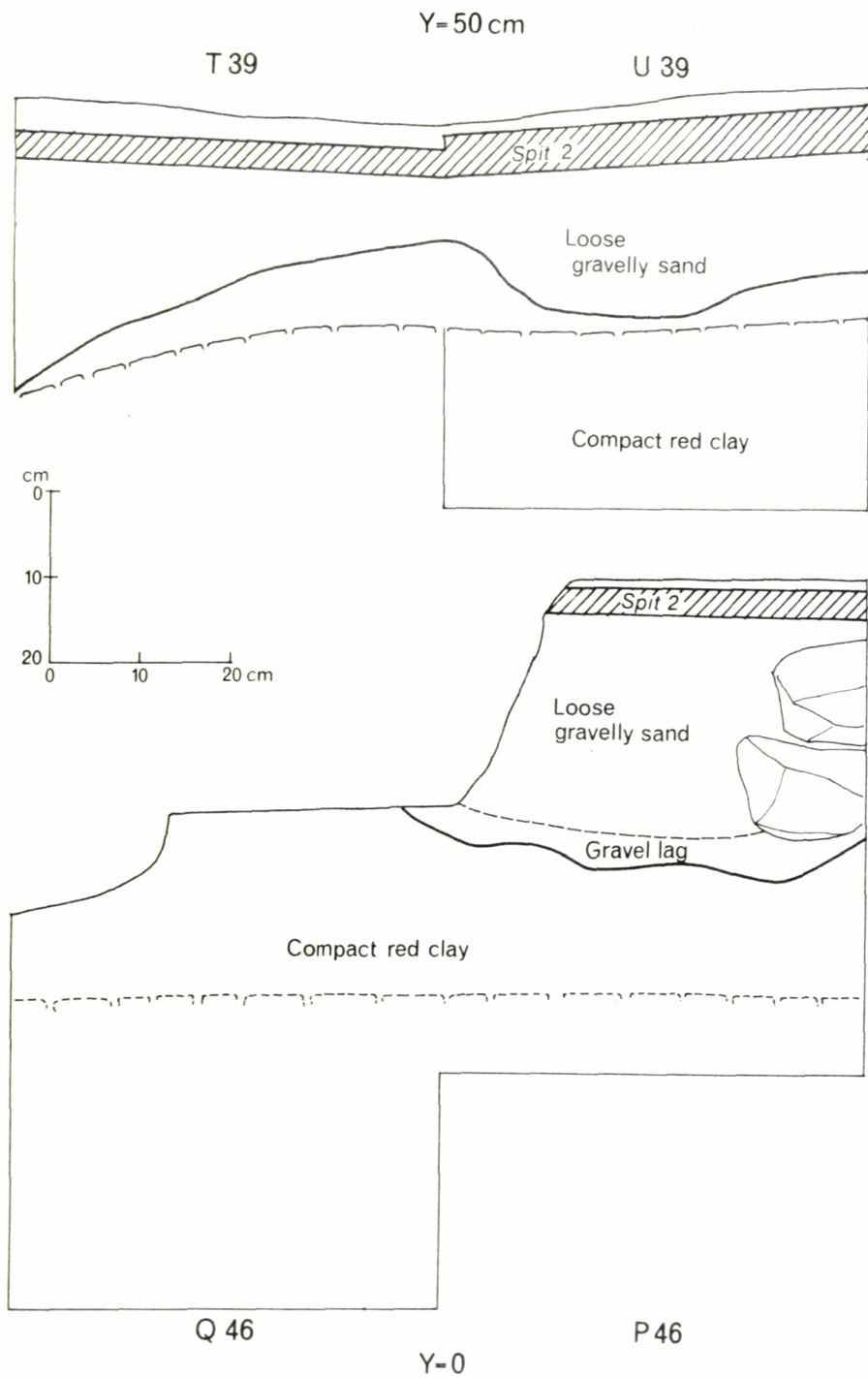


Figure 3

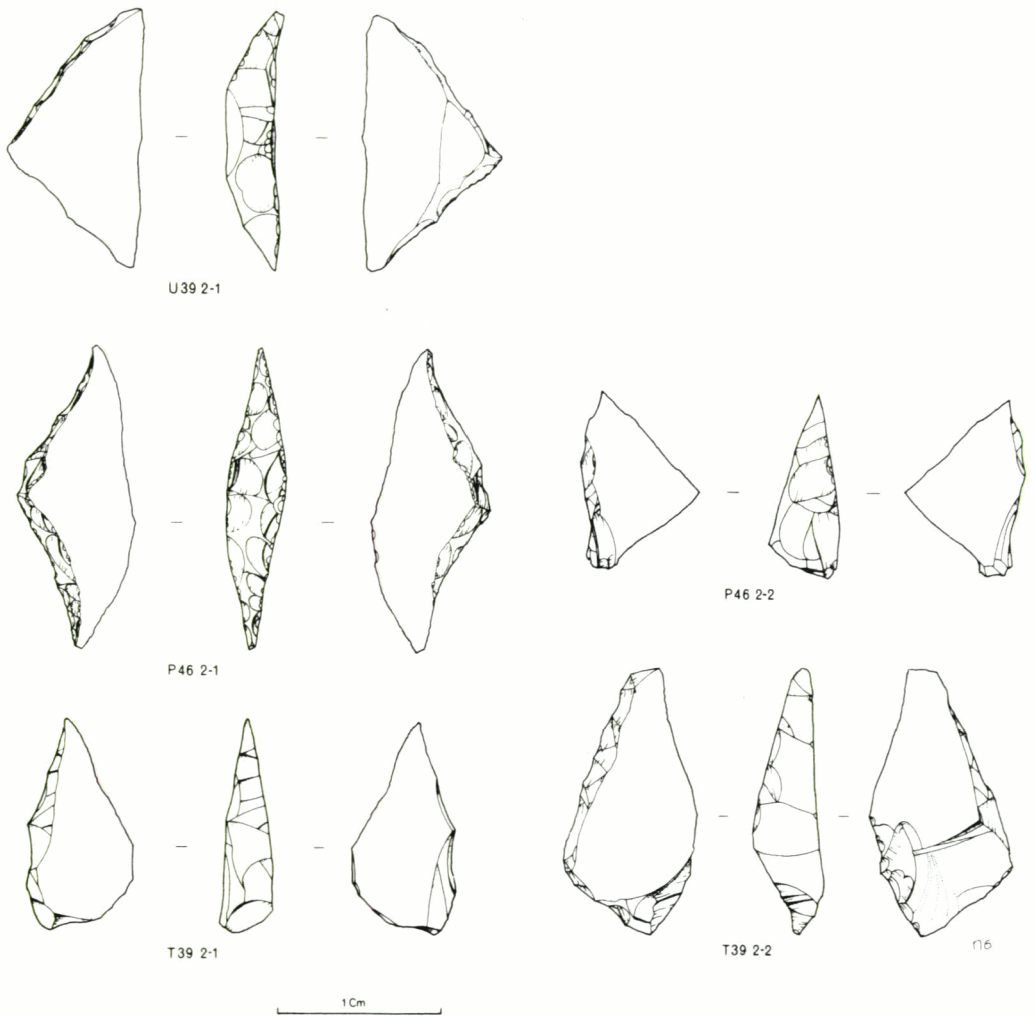


Figure 4

real.

The evidence from Colless Creek negates any simple reconstruction of the distribution of backed blades, especially one which has a sharp demarcation between the southern two thirds of the continent and the tropical north. Nor is it the only recently excavated site to do so. In eastern Queensland the Jourama site is reported to contain one backed blade (Brayshaw 1977:281). In Dortch's (1977:116-117) report on the Western Australian Ord river sites he notes the presence of a type he calls 'Kimberley backed points'. Dortch acknowledges that several of these resemble large geometric microliths or bondi points. On morphological criteria we have little doubt that a number of the artefacts illustrated by Dortch are technically backed blades (Dortch 1977:Fig.5:6-13). Similarly in the Northern Territory some of the 'points' (especially asymmetric) from the Yarra shelter site illustrated by Flood (1966: 57b,no.a; 57c,no.a; plates 15, 17 and 20) have attributes similar to backed blades, such as steep angled retouch on one margin only. If the artefacts from the Ord River and Jourama (and perhaps Yarra?) are accepted as backed blades, the evidence from these sites and Colless Creek, sites which are spread across the entire breadth of tropical Australia, must drastically alter any simple concept of an abrupt northern boundary in the distribution of backed blades.

It is significant that the concept of type boundaries has been used in the literature without any explicit discussion of the nature of such boundaries or how we perceive them let alone the quality of the evidence used to define them. It is normally implied that the rate of change across these boundaries is rapid, that is that boundaries can be represented by a sharp, continuous line that extends across the entire continent. The plotting of distributional patterns also relies on the accurate identification of types. It has been assumed that unquantified typologies, concentrating on archetypes and not the variation around these, are sufficient for this purpose. The definition of boundaries has also assumed that these archetypes are unchanging across the continent. All these assumptions will be confounded if the morphology of artefact types changes spatially in a manner analogous to clines in living organisms.

More important than these assumptions has been the willingness of Australian archaeologists to construct pan-continental distributions on very limited amounts of data. In this case the obvious fault has been to assume that backed blades do not exist beyond the limits of their 'known' distribution. Given the uncertainty of our data together with the lack of any well-developed theoretical basis for the analysis of chipped stone artefacts (including backed blades), we feel it is ill-advised to attempt to draw simple boundaries for artefact distributions which may in reality be often extremely complex. In the case of backed blades we would argue that their distribution extends much further north into tropical Australia than previously acknowledged. Furthermore it appears that their distribution in tropical Australia is discontinuous and that their morphology need not fit archetypes defined from southern Australia.

The new data presented in this paper, and the implications we have drawn from these may well prove to have far reaching consequences for the interpretation of Australian prehistory, especially the 'small tool tradition'. For example the southerly distribution of backed blades has been used as an evidence against

their introduction from island Southeast Asia and at a broader level against the integrity of the 'small tool tradition' (see White and O'Connell 1979:26). These arguments are now in doubt and will be unable to be sustained if further work in tropical Australia leads to the discovery of more sites containing backed blades.

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