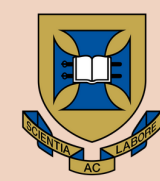


TECHNOLOGY



THE UNIVERSITY OF QUEENSLAND AUSTRALIA

OF THE TEACHER

Technological Analysis of Lithic Reduction at the Nurrenderri Silcrete Quarry, Mithaka Country, Western Queensland

By Fletcher Webster

In collaboration with Michael Westaway,

Chris Clarkson and Doug Williams and the Mithaka Aboriginal Corporation RNTBC

CONTEXT

Home to more than 2000 years of lithic reduction, the Mithaka quarry site of Nurrenderri (the 'Teacher') appears to have been utilised for the creation of a number of general purpose, and potentially ceremonial stone tools. Enigmatically the site contains over a hundred recorded examples of elongated flakes, morphologically not dissimilar to leilira.



Figure 1. Nurrenderri Quarry

Location: Chanel Country, Central West Queensland
Traditional Owners: Mithaka
Local Geology: Quaternary period geological formations: consolidated and unconsolidated alluvium sand, silt, mud and gravel

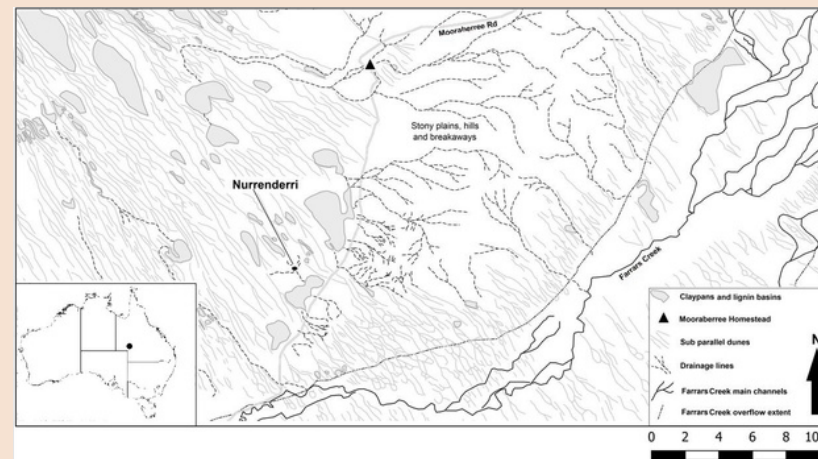


Figure 2. Location Map of Nurrenderri (Williams 2022)

"The lump of dark-headed sandstone rock-grit was known to Europeans as the Black Hill; to the aborigines it was a holy place where Nurrenderri lived, the teacher sent by the Great Spirit to help the aboriginal people." (Duncan-Kemp 1968:274).

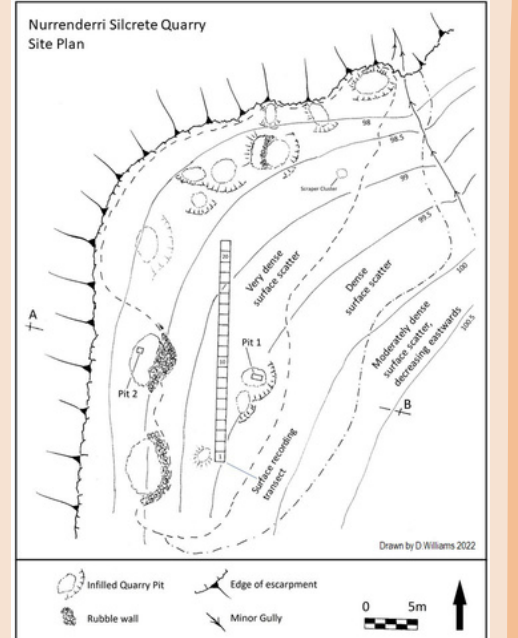


Figure 3. Nurrenderri Sit Plan (Williams 2022)

ETHNOGRAPHY

Leilira have a multitude of utilitarian and ritual uses including:

- Fighting, hunting and butchery
- Ritualistic scarring, subincision and circumcision

Perhaps its greatest role was its use in economic trade and social exchange that allowed for:

- Sharing of Dreaming stories, customs and law
- Access to distant and valuable trade goods

ARCHAEOLOGY

Archaeological literature revealed that leilira are typically:

- Greater than 100mm in length
- Elongate (atleast twice as long as they are wide)
- Parallel sided or symmetrical
- Thin in cross-section
- Display a convergent distal end
- May or may not be retouched
- Display signs of platform preparation and one more arrises

Quarry sites associated with leilira production typically present:

- Prepared pyramidal blade cores of an appropriate size
- As a systematic process, few flake fragments are expected
- Raw material reduction is expected to produce flaked pieces
- Artefacts <20mm are expected with raw material reduction and retouch
- Flakes should display the aforementioned 'leilira-like' features

ANALYSIS

The Nurrenderri Assemblage was studied through morphometric and technological analysis. Attributes identified through the literature review either became those measured or informed constructed indices that were utilised to capture the form of potential leilira and thus identify the production of such technology at the site of Nurrenderri.

10,357 artefacts with a combined weight of 94 kilograms were identified within the assemblage including:

- 464 flakes
- 28 cores
- 276 flake fragments
- 2,848 flaked pieces
- 6,740 artefacts <20mm
- A singular hammerstone.



Figure 5. Examples of a Core (Webster 2022)



Figure 6. Examples of Artefacts <20mm (Webster 2022)

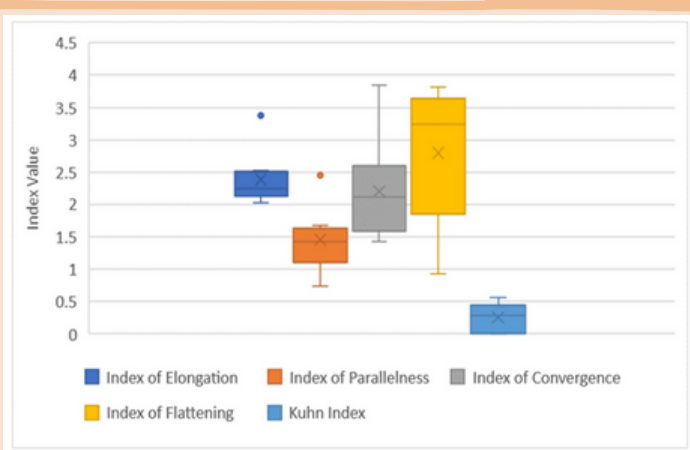


Figure 7. Results of Morphometric Indices (Webster 2022)



Figure 4. Examples of blade-like artefacts identified in the Nurrenderri assemblage (Webster 2022)

CONCLUSION

Blades:

Blades identified in the Nurrenderri assemblage appear to be less elongate, symmetrical than those observed elsewhere in Australia. The blades of Nurrenderri appear to vary greatly in the extent of which their margins converge to a point and the extent to which they are thin. Although 'blade-like', these large flake examples are argued to differ from the typical leilira form.

Quarry:

The abundance of flaked pieces and artefacts <20mm in size attest to the site's use over 2,000 years as a quarry where cobbles were once unearthed and reduced through various means. Multidirectional cores and a range of cortical and shattered material demonstrates that rather expedient lithic practices once took place at this site potentially in and around the production of blade like tools.

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