Some Australian Bifaces

Alec Rainey

Sweeping across a part of Australia from Western Queensland into the Northern Territory, between latitudes 18° and 21° south, lies a monotonous plain, covered sparsely in a tender grass, called the Barkly Tableland. It has an emptiness and vastness typical of Australia, which almost make you giddy to see and can stimulate a terrible sense of isolation. On the horizon in certain places you will see a low line of trees. This marks the course of a seasonal creek. In December or January, in the wet season, it will be running with water from summer storms or from the subsequent Monsoon.

I was a jackaroo on a 5000 square mile cattle station in the middle of this plain in 1966 and 1967. We spent seven consecutive months camping out, rounding up and branding cattle. Prior to this, living in Argentina, I had been introduced to stone age archaeology through contact with archaeologists, and had some practical experience in the matter in the Pampas, where I had also been working with cattle.

One day - on the cattle station in Australia - without the least thought of archaeology in my head, I found a 10 cm biface lying on the ground. And rounding up over the following months I found several more of a similar size in the other parts of the station. Two are illustrated here (figs 1 and 2).

The majority of these bifaces are made of fine jasper, two are of chalcedony. All but one are made from nodules with a hard hammer. They are in pristine condition, unrolled, unbattered and lightly patinated. Several appear to be pre-forms or blanks for bifacial points. Such points do exist on the tableland (‘pirri points’), but are probably too small (0.5 cm or less) to qualify for this role.

My initial reaction at seeing these artefacts was to believe they were Palaeolithic handaxes. I then realised I was in the privileged position, for an archaeologist, of actually living with the people who, apparently, were responsible for making the objects in question, or who should know something about them first hand. Many of my companions were members of the Warramunga, Wambaya and Karewa peoples, natives of that area.

But turning a biface over in his hands one of these men shook his head and said firmly "No, mate, this isn’t made by a man". The others agreed with him, and they proceeded to demonstrate to me what a man-made stone tool looked like and how it was made (an unretouched unifacial ‘leilra’ blade).
Figure 1: Australian biface

Figure 2: Australian biface
A year or so later, when I moved to Southern Australia, I showed the artefacts to an archaeologist living in Melbourne to whom I had been given an introduction by Dr Osvald Menghin, the grand old man of archaeology in Argentina. Dr Alexander Gallus, this archaeologist, who was Hungarian, was clearly stunned at the sight of them and expressed the opinion to me that they must be at least fifty thousand years old (which was an outrageous date for Australian archaeology at the time). Then he took them to Canberra and showed them to the director of the Australian Institute for Aboriginal Studies, Mr (now Dr) Frederick McCarthy, and to archaeologists at the Australian National University (ANU).

I received a letter from Mr McCarthy dated 5th June 1970, in which he wrote:

"Needless to say I was amazed when I saw them .... The biface spear head is well-known as a Waanji type in the nomenclature of Australian Stone Implements, but I have not seen one in ribbon-stone before. The handaxes are a new type .... We have found biface oval shaped handaxes in an extensive area from north-eastern New South Wales to the Kimberly district of Western Australia, but these are usually blanks on which a blade is ground to form an axe.

They display typical characteristics of Australian biface points - irregular flake scars (not parallel as on Solutrean points), and a thin convex butt, and ... they are in fact merely enlarged versions of these points."

He said many archaeologists at ANU to whom he showed them thought they might be hoaxes.

Dr John Mulvaney was away at this time and first saw them at the beginning of 1971. Writing to me on February 17th 1971, he indicted that he had no difficulty in fitting the bifaces into the Australian context and that he thought they could be "quite modern".

All of them are surface finds and all but one were found in complete isolation in the middle of the wide open plain kilometres apart. The one in question, which is made of a fine white chalcedony, was lying in an area of an acre or more scattered everywhere with chippings of the same material. The rock is visible at the surface and this is certainly a quarry. My Aborigine companions referred to this rock as 'the cloud that fell down from the sky'.

Jasper is present in nodules of varying size over much of the Tableland. But the question of the context of the bifaces remains open.

Vein Quartz

James Knight


Introduction

The archaeological analysis of flaked vein quartz has long been recognised as being difficult, but much of this has been self imposed by archaeologists. Whilst vein quartz is not as easy to analyse as flint or chert, the real problem stems from the assumption that it should show the same flaking features as these materials. It has been little recognised that the crystal structure of vein quartz differs greatly from that of flint, and as a consequence cannot be expected to consistently exhibit the same flaking features.

Many studies of lithic assemblages ignore vein quartz artefacts and the analysis of the material is perceived as being difficult or impossible by many archaeologist who well understand the flaking features of worked flint and chert. This has led to frustration and some archaeologist have accepted Hallam's description of worked vein quartz as "horrid little bits of stone" (1977, 169). Although Hallam originally use the phrase tongue in cheek (pers. comm.), many archaeologists appear not to (e.g. Bowdler 1984, 107).

This perception is unfortunate as vein quartz was a commonly used raw material in prehistory, being distributed throughout the world and easy to obtain from outcrops or as pebbles. While it is more difficult to work than flint, it produces extremely sharp cutting edges and frequently occurs in archaeological assemblages, often as the predominant raw material. It is unfortunate that such a widely used raw material is so poorly understood. This paper attempts to redress the balance by describing the diagnostic features of both worked and unworked vein quartz.

What is Vein Quartz?

Vein quartz forms by crystallisation within silica-rich fluids (Deer et al. 1963, 214), and is very variable in composition. The characteristics of vein quartz vary with the geological environment, and although it is primarily composed of silicon dioxide (SiO₂), gaseous, liquid, solid or crystalline...