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## **Sue Bulmer and New Guinea archaeology**

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### **Introduction**

The year 1959 marked the beginning of modern archaeological excavations in Papua New Guinea. Over sixty years ago, a 26-year-old American anthropology student, Sue Bulmer, excavated the sites of Yuku and Kiowa in the Central Highlands of Papua New Guinea. Thus began the remarkable career of Sue Bulmer, a true trailblazer in our discipline. This career further blossomed when in 1968 Bulmer became a resident of Port Moresby and focused her attention on the archaeology of the south Papuan Coast. Bulmer's career will be looked at through three of her most important works: Central Highlands, Papuan South Coast, Wanelek and the Kaironk Valley.

### **Central New Guinea: The early days**

The year 1964 marked a turning point in the archaeology of Papua New Guinea with the publication of Sue and Ralph Bulmer's 'The Prehistory of the Australian New Guinea Highlands' in the leading anthropological journal *American Anthropologist*. This landmark paper was a result of the first modern archaeological fieldwork in the area (1959–60), undertaken by Sue. It also formed the basis for her 1966 Master of Arts dissertation at the University of Auckland. The 1964 paper was based

on the excavations of Yuku and Kiowa, the former located near Lai River in Western Highlands at c. 1,250 m above sea level, the latter in the Eastern Highlands at c. 1,550 m above sea level. The excavations identified change over time and allowed the reporting of a three-phase occupation of the Highlands: Phase I showed a pre-Neolithic hunting and gathering society; Phase II indicated economic change (agriculture) and new tool kits such as waisted axes, lenticular sectioned adze-axes, and pestle-mortars; and Phase III incorporated planilateral sectioned adze-axes and the presence of pots in the eastern Highlands. These three phases later expanded into five. Of importance was the early realisation that there were no subsequent movements of people into the Highlands after initial settlement. Although no radiocarbon dates were available at the time of publication, Bulmer argued that, based on occupation in Australia, New Guinea was occupied by 12,000 years ago and probably well before that. When dates were available they confirmed an occupation at both sites beginning in the terminal Pleistocene and throughout the Holocene. The 1964 article is remarkable not only for reporting the earliest modern excavations in New Guinea, but also for its modelling of a changing past.



**Figure 34.1. Waisted tool from Yuku, which Bulmer saw as part of her Phase II.**

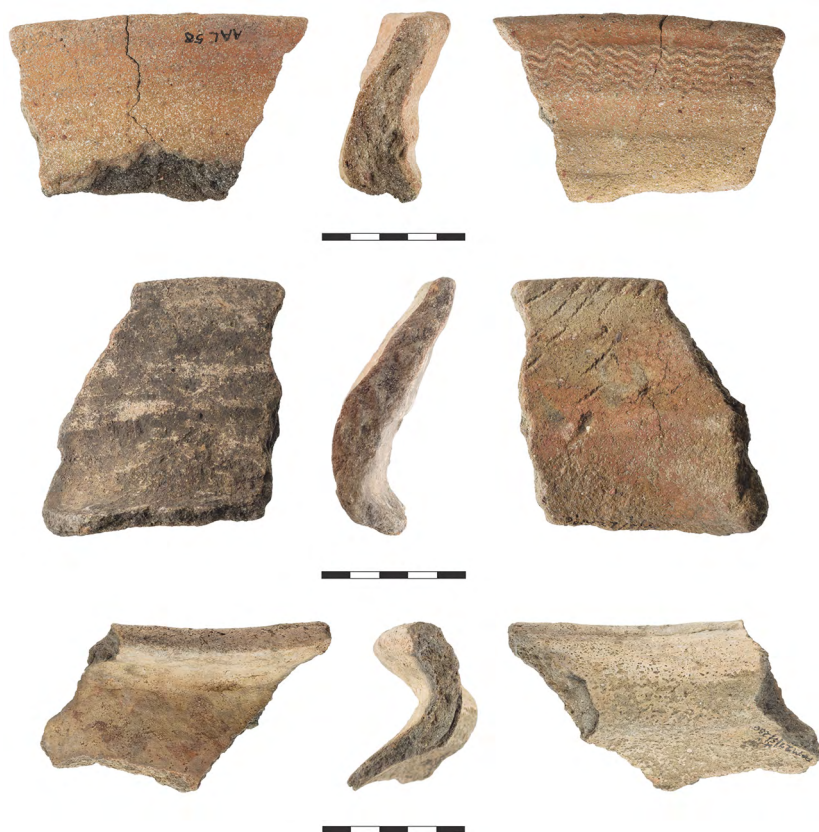
Source: Photo by Glenn Summerhayes.

Both Yuku and Kiowa contained waisted tools (Figure 34.1), which Bulmer interpreted as a hoe and as part of her Phase II. She saw these as ‘a tool kit of pre-agricultural people in the Highlands’ (Bulmer and Bulmer 1964:65), although she did not discount their later use in gardening.

## **Papuan Coast – late 60s/early 70s: Time to write a PhD**

Bulmer became a resident of Port Moresby in January 1968 and thus began her groundbreaking archaeological research into the Port Moresby area. Her main aim was to examine cultural change focusing on prehistoric evidence different to that recorded in the 1960s. During the late 60s and until the end of 1972, Bulmer undertook survey and excavation work along the Papuan coastline as part of her PhD research at the University of Papua New Guinea. Bulmer excavated a number of important sites, including Nebira 2 (ACJ) in 1968–69, Eriama 1 (ACV) in 1969 and Taurama (AJA) in 1972. From these excavations, and also from surface collections of 67 archaeological sites from the Port Moresby region, Bulmer developed a cultural sequence of three periods based on six styles covering 2,000 years up to the ethnographic trading systems seen in the ethnographic past. She also identified a major gap in the sequence around 1200 BP, called the Papuan Hiccup, where she postulated outside influence with intrusive styles of pottery. The work laid down the basis for the archaeology of this region. She left Papua New Guinea at the end of 1972 and relocated with her husband to Auckland, New Zealand, where she finished her analysis and completed her PhD in 1978.

Three sherds (Figure 34.2) from her excavations at Taurama were selected for the *Uncovering Pacific Pasts* exhibition at the Papua New Guinea Museum and Art Gallery in Port Moresby and are shown below.



**Figure 34.2. Three pot sherds from South Coast Papua, from excavation site AAL in Taurama.**

Source: Photo by Glenn Summerhayes.

## **Wanelek – the Kaironk Valley: An excursion from her PhD research**

In 1971–72 Sue Bulmer and her children joined her husband Ralph in the Kaironk Valley, located in the Bismarck Schrader Ranges, at the western end of Madang Province. Ralph Bulmer was undertaking anthropological research in this valley that he began in 1959–60. Such an opportunity allowed Sue to undertake groundbreaking archaeological fieldwork. Sue returned twice in 1972 and later in 1973–74 and excavated the site of Wanelek (JAO) (c. 1,700 m above sea level) that was discovered in a road-widening operation. The excavation of Wanelek (Figure 34.3)

demonstrated human occupation from 16,000 years ago. Finds argued to be house structures and the early mid-Holocene presence of pottery generated much debate among archaeologists. Wanelek is important as an indicator of contact between coastal communities and the interior. On the basis of pottery and also stone tool technology, Bulmer argued that Wanelek indicated early contacts with Austronesian-speaking communities on the north coast. Archaeological finds also included mid-Holocene pestles and mortars, indicating nut cracking. Also found were axe blades, which indicated trade with the Hagen tribes to the south. They were traded in from the Jimi quarries in finished form.



**Figure 34.3. Sue Bulmer's excavation site at Wanelek in the Kaironk Valley, 1972.**

Source: Photo with permission of Glenn Summerhayes.

Sue Bulmer described these axes in her 1964 paper 'Prehistoric Stone Implements from the New Guinea Highlands', published in the journal *Oceania*:

The Kaironk blades are all nearly rectangular in cross-section, with only slightly curved faces, and are all ungripped, almost completely polished, and have gradual symmetrical bevelling on both faces with only final sharpening from one face. The blades are thickest at or near the poll, and have markedly curved cutting edges.

One blade is shaped by sawing along its sides, and others could have been but are so completely polished that no traces are visible. Likewise, it is not possible to know the character of the original flaking or shaping from these well-finished blades. All are made of contact metamorphosed argillites and tuffaceous greywackes (petrographic groups II-III), materials which were probably available only from a limited number of sources. (Bulmer 1964a:250)

Objects from Bulmer's work in the Kaironk Valley selected for the exhibition include a tanged blade (Figure 34.4), an imported Jimi axe (Figure 34.5) and a broken pestle (Figure 34.6).



**Figure 34.4. Tanged blade from Wanelek.**

Source: Photo by Glenn Summerhayes.



**Figure 34.6. Pestle from the Kaironk Valley.**

Source: Photo by Glenn Summerhayes.



**Figure 34.5. Jimi axe from Kaironk Valley.**

Source: Photo by Glenn Summerhayes.



## Conclusion

Sue Bulmer was a pioneering archaeologist unravelling the past of Papua New Guinea. Her groundbreaking work in the Central Highlands, the Kaironk Valley and the Papuan coast around Port Moresby laid the fundamental framework for subsequent modelling of these regions' pasts.

Objects highlighted in this chapter were on display at the Papua New Guinea National Museum and Art Gallery in April 2020.

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