rock art research in Iran. It should be mentioned that since the Dowzdaghi petroglyphs were created in the open air, a large number must have been destroyed under the impact of the sun, wind, atmospheric precipitation, seismic activities, and cycles of heat and cold weathering so that many depictions are badly worn and some are unrecognisable.

Acknowledgments
We would like to thank Dr Behrooz Omrani, Director of ICHTO of Eastern Azerbaijan, for providing the budget of the Archaeological Project of Zarkhané and for his support. Our thanks also go to Papur Kazempur who guided us to find the petroglyphs, for his logistic support.

Kamal Aldin Niknami, Mehdi Kazempur and Nasir Eskandari
Department of Archaeology
University of Tehran
Enghelab Street
Tehran
Iran
E-mails: kniknami@ut.ac.ir, M.Kazempur63@ut.ac.ir, Nasir.eskanari@ut.ac.ir

REFERENCES

Two Kakadu headdresses
By DAVID M. WELCH

The following is a brief report of two headdress types appearing in rock art in Kakadu National Park, so uncommon that only one example of each is known to the author in this region. These paintings were found while exploring the Arnhem Land Plateau in 2008 and 2009.

The first is a hoop headdress and the second is one of radiating lines with end blobs, both appearing in ethnographic photographs from other regions of Australia.

Hoop headdress
Figure 1 is a simple human figure carrying a spear-thrower in one hand and a boomerang and multi-barbed spear in the other. Short transverse lines across both arms represent armbands, and similar lines at the waist represent decoration such as the wearing of a hair string belt.

Above the head are two circles or loops, likely to be representing a headdress of similar shape. This sole figure is painted on the small panel of a boulder at plain level. Other art panels on the same boulder depict small fish, a hand stencil and yams. The quartzite ‘step’ below the figure has been deliberately chipped away, this action being consistent with Aboriginal ‘testing’ of the rock to see if it is suitable for making blades. Rock edges at many Kakadu sites have been extensively chipped in the manufacture of stone tools and weapons.

The headdress depicted on Figure 1 is likely to
represent a type of hoop headdress worn by the man in Figure 2. A member of either the Wangkangurru or Dieri tribe, in the vicinity of Lake Eyre in South Australia, this man was photographed by George Aiston in about 1920. He carries a spear in his right hand and a boomerang and shield in his left. He wears body paint and a piece of cloth replaces his traditional hair belt. On his head are three items: a charpoo (white forehead band), a munta (net) filled with white cockatoo feathers, and a thin piece of root made into a hoop. In this region of Australia, the hoop is added to the headdress in the belief that it makes the wearer invisible to others (see Aiston and Horne 2009: ii, 92, 134–137 for more photographs and details).

During research of archival photographs from various institutions around Australia, I also came across images showing various hoop headdresses worn by people from the Kimberley. One such photograph, Figure 3, shows a line of men, each wearing ceremonial body decoration, and holding a spear in their right hand and a shield in the left.

**Headdress of radiating lines with end blobs**

Figure 4 shows part of a panel of human figures, also on
the Arnhem Land Plateau and within Kakadu National Park. The two figures at right may wear a headdress of decorative material tied to the head, or alternatively, their long hair is swept back behind the head.

To the left is a simple human figure wearing a headdress represented by radiating lines with end 'blobs' of paint. Again, use of this headdress type is not known to the Kakadu region in Historic times, but appears in the ethnographic record for central Australia (Mountford 1976: 304). I have also seen several other paintings of this headdress in rock art from the Kimberley region of Western Australia.

The nature of the lines with end blobs can be determined by examining Aboriginal ceremonial decoration, where people adorn themselves with body paint, feathers and leaves. Radiating lines with end blobs may represent several types of decoration placed on the ends of sticks. One consists of string pieces, as seen in Figure 5. Another is where lumps of feather or plant down are glued to the ends of sticks, and a third type involves shaving the ends of each stick with a stone scraper and leaving the curled shavings stuck to the ends of each stick, creating end swellings.

The occurrence of these two headdress types in Kakadu rock art expands their known range and provides further evidence of cultural change through time, and the spread of Aboriginal practices across the Australian landscape.

Dr David M. Welch
P.O. Box 503
Virginia, N. T. 0834
Australia

REFERENCES


Erratum: In the paper ‘GigaPan panoramas for rock art panel documentation: a practical guide’ by R. Mark and E. Billo, in the previous issue of RAR, pp. 265–267, it was stated that the GigaPan Pro is powered by a lithium-ion battery. It uses in fact a proprietary 7.2V, 4300 mAh NiMH battery.