

# Kakapel rock art timeline reveals 9,000 years of painters in Kenya

April 22 2026, by Sandee Oster



Retracing of Kakapel rock art, showing all four layers of art. Tracings by C. Namono and B. Smith, redrawn by W. Voorveld and colored for publication by K. Vena. Credit: Namono et al. 2026

A recent study [published](#) in *Azania: Archaeological Research in Africa* presents the first millimeter-accurate recording of the paintings at Kakapel rock shelter in Kenya, linking the layers of rock art painted over

thousands of years to at least three culturally and genetically distinct groups.

The combination of rock art analysis, aDNA, and excavation data makes Kakapel one of the most comprehensively understood rock art sites in eastern Africa.

## **Kakapel rock art site**

Kakapel, formerly Kakapeli, is a Kenyan national monument located in the Busia District and was first described by Osaga Odak in March 1976.

Odak identified three painted panels in the shelter depicting humans, cattle, and geometric motifs. He warned that the recent clearing of the surrounding vegetation had left the site vulnerable to damage, including chalk and charcoal graffiti by local children. Since Odak's visit, the graffiti at the site had significantly increased until it was removed during conservation work in 2006.



Map showing location of Kakapel in relation to other sites. Credit: Namono et al. 2026

Though such markings are often described as vandalism, Dr. Catherine Namono, lead author of the study, clarifies, "I wouldn't call it vandalism because ... I feel vandalism is normally done by tourists ... Most of the time, it's children who would write, not knowing that they're actually

doing something wrong. They're trying to express themselves and show that they're happy..."

During fieldwork in November 2011, Dr. Namono and Prof. Benjamin Smith spent two weeks tracing the main panel at Kakapel, creating the first millimeter-accurate illustration of the shelter's rock art. The researchers identified multiple images missed by Odak and identified four distinct layers of images.

Later excavations yielded four layers of occupation. The earliest belonged to the Kansyore-tradition ceramic-producing fisher-foragers (ca. 9000–3900 cal. BP), followed by the Early Iron Age farmers linked to Ntu-speakers (ca. 2300–1800 cal. BP); Later Iron Age agro-pastoralists associated with Nilotic speakers (ca. 1200–300 cal. BP); and finally, a second expansion of Nilotic people associated with the Teso speakers.

While it is tempting to connect the four separate rock art layers to the four occupational phases, the authors caution that some groups may have contributed significantly to the rock art of Kakapel without leaving a significant archaeological record or vice versa. Thus, to determine whether the rock art layers correspond to the occupations, each layer was digitally separated and examined.



Kakapel rock art. Credit: C. Namono in Namono et al. 2026

## Examining the art

The oldest layer consists of geometric designs, including circles, concentric circles with radiating lines, and divided block shapes, typically painted in red and white. These images are similar to the "Twa rock art" (10,000–3000 years old). aDNA from the Phase I skeleton at the site showed significant genetic affinity with the Mbuti, a present-day Pygmy group from Central Africa, suggesting that Kakapel's "Twa" painters were a mixed Pygmy group culturally akin to the Mbuti.

The second layer consists of at least 25 long-horned humpless Sanga-

type cattle. Interestingly, it seems this art was not made by the Ntu-speaker-linked second occupation of the site, but rather by the third occupation's Later Iron Age agro-pastoralists.

The cattle are depicted in side profile, with horns and ears in twisted perspective. The style is reminiscent of ["Ethiopian-Arabian" rock art](#) tradition found in the Horn of Africa and stretches back to the Pastoral Neolithic.

aDNA analysis of two Later Iron Age skeletons supports the attribution of this art to individuals closely related to Western Nilotic speakers, with the older skeleton (906–731 cal. BP) retaining a small ancestry component from these Pastoral Neolithic populations. Three of the cattle are painted in black, which, if carbon-based, could provide future dating potential.

"It is likely that the black pigment could be dated and this is an avenue we hope to follow-up in future research," Prof. Smith explained. "Sampling would require a government permit and needs to be done extremely carefully so as not to damage or destabilize the painted surface."

The third layer includes fine, white geometric motifs, likely a continuation of the "Ethiopian-Arabian" style, in which rock art became increasingly dominated by geometric motifs, tribal markers, and cattle brands.

Interestingly, the younger Later Iron Age skeleton (311–100 cal. BP), which would relate to this period of rock art creation, has completely lost its Pastoral Neolithic ancestral component and appears to be fully Western Nilotic. This later population, likely ancestral to today's Luo, is probably responsible for the final layer of rock art.

While Odak could only suggest that the paintings predated the arrival of the Kalenjin and lay "beyond the reach of oral history," this new research links the art to specific groups, occupations, and time periods, making Kakapel one of the best-studied rock art sites in eastern Africa.

## **Future work**

The combination of aDNA and regional history provides one of the most detailed insights into rock art authorship in East Africa, directly linking the rock art to groups who occupied the shelter. However, the meaning behind the rock art is still being investigated.

"There are no direct traditions or memories of people painting in Kakapel rock shelter. No individual historic painters are remembered," Prof. Smith said, yet the site retains profound significance for the local community.

Dr. Namono elaborated, "Rock art, as with many African communities, is recognized as made by the ancestors, and even in that community, there's a very wide range of mixture of groups... The fact that it was connected with those before them in the landscape gives it significance..."

"So that antiquity gives the present communities that connection with the past and makes it relevant for them to preserve it."

"There are ongoing ceremonies and traditions in Kenya that we believe are similar to those that led to the creation of these paintings," Prof. Smith said. "We intend to use these living traditions to explain the meanings and motivations behind the ancient art of Kakapel."

Rock art in many locations is currently under threat from deforestation, illegal mining, and development; thus, it is important to recognize the

significance of sites like Kakapel, and work with local communities and appropriate government and non-government organizations to protect them.

"Kakapel Shelter provides a good example of successful local heritage management," Prof. Smith said.

**More information:** Catherine Namono et al, The rock art of Kakapel Shelter, western Kenya, *Azania: Archaeological Research in Africa* (2026). [DOI: 10.1080/0067270x.2026.2652709](https://doi.org/10.1080/0067270x.2026.2652709)

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